

QUALIFICATION OF THE SECOND ICS-3000 ION CHROMATOGRAPH FOR USE AT THE DEFENSE WASTE PROCESSING FACILITY

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October 2009

Applied Computational Engineering and Statistics
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EXECUTIVE SUMMARY

The ICS-3000 Ion Chromatography (IC) system installed in 221-S M-14 has been qualified for use. The qualification testing was a head to head comparison of the second ICS-3000 with the initial ICS-3000 system that was installed in 221-S M-13. The crosscheck work included standards for instrument calibration and calibration verifications and standards for individual anion analysis, where the standards were traceable back to the National Institute of Standards and Technology (NIST). In addition the crosscheck work included the analysis of simulated Sludge Receipt and Adjustment Tank (SRAT) Receipt, SRAT Product, and Slurry Mix Evaporator (SME) samples, along with radioactive Sludge Batch 5 material from the SRAT and SME tanks.

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LIST OF ABBREVIATIONS

ACES	Applied Computational Engineering and Statistics
DWPF	Defense Waste Processing Facility
EG	Eluent Generator
HLW	High Level Waste
IC	Ion Chromatography
JMP	Statistical software package from SAS Institute, Inc. [4]
NIST	National Institute of Standards and Technology
REDOX	Reduction-Oxidation
RFIC	Reagent Free Ion Chromatography
SME	Slurry Mix Evaporator
SRAT	Sludge Receipt and Adjustment Tank
SRNL	Savannah River National Laboratory
TTR	Technical Task Request
TT&QA	Task Technical and Quality Assurance

1.0 INTRODUCTION

The Defense Waste Processing Facility (DWPF) requires the analysis of specific anions at various stages of its processing of high level waste (HLW). The anions of interest to the DWPF are fluoride, formate, chloride, nitrite, nitrate, sulfate, oxalate, and phosphate. The anion analysis is used to evaluate process chemistry including formic acid / nitric acid additions to establish optimum conditions for mercury stripping, reduction-oxidation (REDOX) chemistry for the melter, nitrite destruction, etc. The DWPF Laboratory (Lab) has recently replaced the Dionex DX-500 ion chromatography (IC) systems that had been used since 1998 by the first of two new ICS-3000 systems. The replacement effort was necessary due to the vendor of the DX-500 systems no longer supporting service contracts after 2008.

DWPF purchased three new ICS-3000 systems in September of 2006. The ICS-3000 instruments are (a) designed to be more stable using an eluent generator to make eluent, (b) require virtually no daily chemical handling by the analysts, (c) require less line breaks in the hood, and (d) generally require less maintenance due to the pump configuration only using water versus the current system where the pump uses various hydroxide concentrations. The ICS-3000 instruments also allow the DWPF to maintain current service contracts, which support routine preventive maintenance and emergency support for larger problems such as component failure.

One of the three new systems was set up in the DWPF Lab trailers in January of 2007 to be used for the development of methods and procedures. This system will continue to be used for training, new method development and potential improvements to current methods. The qualification of the other two ICS-3000 instruments was a phased effort. This effort was supported by the Applied Computational Engineering and Statistical (ACES) group of the Savannah River National Laboratory (SRNL) as authorized by the Technical Task Request (TTR) [1] and as directed by the corresponding Task Technical and Quality Assurance (TT&QA) plan [2]. The installation of the first "rad" system into the M-13 Lab module required modifications to both the Lab module and to the radiohood. The installation was completed in July 2008. The testing of this system was conducted as directed by the TT&QA plan [2], and the instrument was qualified for use at the DWPF Lab as documented in [3]. As part of that evaluation, a recommendation was made that the second ICS-3000 be installed in the M-14 module and that qualification testing of that system be conducted. The purpose of this technical report is to provide a review of the data generated by these tests that will lead to the recommendation for the qualification of the M-14 ICS-3000 instrument.

2.0 EXPERIMENTAL PROCEDURE

As indicated above, the second "rad" ICS-3000 was implemented in the hood in M-14; it was debugged and tested to ensure that it was set up to the vendor's specifications and that it was performing as anticipated. The testing of the M-14 ICS-3000 versus the M-13 ICS-3000 instruments was a head-to-head comparison involving standards, process samples, and simulant samples. The units of measurement for the sample results generated by these two instruments are given in milligrams per kilogram of slurry or, equivalently, in parts per million (ppm). The units of measurement for the standard results generated by these two instruments are given in milligrams per liter (mg/L) or, equivalently, in parts per million (ppm).

In the subsections that follow, a comparison between the analytical methods of the two types of instruments is provided; the calibrations of the two instruments are discussed; and a description of the protocols utilized in measuring the simulant sample analyses, spiked sample analyses, and sludge sample analyses are provided.

2.1 Method Development

The IC-3000 systems use a hydroxide based eluent and the AS-11 separator column. The ICS-3000 systems use what is called Reagent Free Ion Chromatography (RFIC). The RFIC is done with an Eluent Generator (EG) Module, which contains a cartridge with a quantitative amount of 4M potassium hydroxide (KOH). The required eluent (KOH) concentration is then made according to specifications prescribed in the method. The EG allows lower concentrations of hydroxide to be prepared more precisely and requires no mixing, which in turn allows for better separation than provided by the DX-500 systems of some of the more easily eluted smaller monovalent anions and provides more stable retention times.

2.2 Calibration

The ICS-3000 instruments were calibrated with NIST* traceable standards. Calibration solutions were prepared using 8 individual 1000 ppm anion solutions. The calibration verification standards (check standards) are prepared with a NIST traceable multi-anion standard that includes 7 anions and nitrite. The nitrite solution is from a different vendor than the individual nitrite solution used for the calibration solutions.

The IC instruments are calibrated over a range of 1 ppm to 20 ppm for each anion, and the samples are diluted to ensure that the anion concentrations are in this range. DWPF routinely performs a 500X and a 5000X dilution. The dilutions are set up so that each anion's concentration will be within the 1 to 20 ppm range of the calibration in one or both dilutions. The 500X dilution is used to provide "less than" values for anions not typically found in the sludge, i.e. fluoride, chloride and phosphate. The dilutions are also limited due to radiation levels in the samples for ALARA purposes. The IC instrument calibration is verified daily using a 2 ppm standard and a 16 ppm verification standard. Included as part of the data in Table A1 of Appendix A are measurements generated by the ICS-3000 instruments for such standards. Exhibit A1 of Appendix A provides a series of plots of these measurements. A statistical review of these data is provided in Section 3.

2.3 Sludge Sample Analysis

Another crosscheck of the two instrument conducted as part of this study is the direct comparison between the M-13 primary ICS-3000 used in sample analysis and the M-14 ICS-3000 with actual SRAT Receipt, SRAT Product and SME Product material. Six samples were analyzed, with 2 samples coming from each of the major tanks. As mentioned earlier, the sample preparation process involves preparing two dilutions, a 500X and a 5000X. Typically 4 Pnut vials of sludge are used. From each Pnut vial a roughly 1 g of sample to 100 g dilution with deionized water is made. From each of the four 100X dilutions, 500X and 5000X dilutions are prepared. Approximately 20mL of each of the 8 dilutions is removed from the DWPF shielded cells to a glovebox where the final sample is filtered into an IC autosampler vial. A typical sample run on the IC is provided in Table 1.

* NIST – National Institute of Standards and Technology

Table 1. Sequence of Analyses for a Typical Sludge Sample Set

Blank
2 ppm check standard
16 ppm check standard
5000X dilution 1
5000X dilution 2
5000X dilution 3
5000X dilution 4
Spiked Sample
500X dilution 1
500X dilution 2
500X dilution 3
500X dilution 4
2 ppm check standard
16 ppm check standard

The measurements resulting from these comparisons are included in Table A1 in Appendix A. Exhibit A2 in Appendix A provides a series of plots of these measurements. In this exhibit, the differences of the raw measurements from the two instruments are plotted for those anions whose concentrations in the process samples are typically above detection limits. A statistical review of these data is provided in Section 3.

2.4 Simulated Sample Analysis

Simulated samples, for the crosscheck work, were prepared from NIST traceable individual 1000 ppm anion solutions. The simulated samples were prepared to match the anion concentrations for the average SRAT Receipt, SRAT Product, and SME samples in both the 500X and 5000X dilution. Anions typically not found in the sludge or that are diluted below detection, were added at the lowest calibration level, 1 ppm, to not only ensure that these anions could be measured at this concentration but to ensure that “tailing” from a larger peak would not prevent accurate measurement of these anions. In the 500X dilutions there are anion concentrations outside the 1 – 20 ppm calibration range. These anions would be quantified on the 5000X dilution; however, they would still be in the 500X dilution and could affect other peaks in the chromatograph. Measurements generated by this crosscheck work are provided as part of the data in Table A1 in Appendix A. Exhibit A3 in Appendix A provides plots of these results grouped by type of simulant and the known concentrations of the anions. A statistical review of these data is provided in Section 3.

2.5 Analysis of Calibration Standards as Samples

Measurements were conducted on the 1, 10, and 20 ppm standards that are used for calibrating the instruments. The measurements generated by this crosscheck work are provided as part of the data in Table A2 in Appendix A. Exhibit A4 in Appendix A provides plots of these results. A statistical review of these data is provided in Section 3.

2.6 Analysis of Standards Prepared from Dried Salts

DWPF Lab prepared 10 ppm solutions for each individual anion from dried salts and measured these solutions with both IC instruments. These measurements provide an independent verification of the calibration curves of the instruments as well as verifying the ability of the instruments to provide positive identification of individual anions. The measurements generated by this crosscheck work are provided as part of the data in Table A2 in Appendix A. Exhibit A5 in Appendix A provides a plot of these results. A statistical review of these data is provided in Section 3.

3.0 STATISTICAL ANALYSIS

In this section, the statistical comparisons of the measurements generated by the M-13 and M-14 ICS-3000 instruments from the crosscheck work described above are conducted and evaluated. JMP Version 7.0.2 [4] was used to perform these analyses. These statistical results served as the basis for the qualification of the M-14 ICS-3000 instrument, and the statistical comparisons of the following sections provide the justification for the qualification.

3.1 Preliminary Comparisons Using Standards

The initial crosschecking of the instruments included the measurement of 2 and 16 ppm standards. As indicated above, the data from this work are provided in Table A1. Table 2 below provides the minimum (min) and maximum (max) values for each anion for each instrument. The sample results consistently met the pre-existing criteria of 20% agreement limit for the 2 ppm standard (i.e., 1.6 to 2.4 ppm) and 10% agreement limit for the 16 ppm standard (i.e., 14.4 to 17.6 ppm) between the measurements and the standard values for each of the instruments. The results from these standards indicate that these instruments are capable of providing measurements for these standards that consistently meet the criteria for agreement with the reference values.

Table 2. Testing with 2 and 16 ppm Standards

Standard	Instrument	Anion	Number of Observations	Minimum Measurement (ppm)	Maximum Measurement (ppm)
2ppm	M-13	Chloride	12	1.95	2.01
2ppm	M-13	Fluoride	12	1.98	2.04
2ppm	M-13	Formate	12	1.97	2.04
2ppm	M-13	Nitrate	12	1.91	2.03
2ppm	M-13	Nitrite	12	1.97	2.05
2ppm	M-13	Oxalate	12	2.08	2.17
2ppm	M-13	Phosphate	12	1.92	2.21
2ppm	M-13	Sulfate	12	1.97	2.05
2ppm	M-14	Chloride	12	1.89	1.94
2ppm	M-14	Fluoride	12	1.99	2.05
2ppm	M-14	Formate	12	1.97	2.07
2ppm	M-14	Nitrate	12	1.83	2.01
2ppm	M-14	Nitrite	12	1.95	2.07
2ppm	M-14	Oxalate	12	2.06	2.12
2ppm	M-14	Phosphate	12	1.86	2.02
2ppm	M-14	Sulfate	12	1.91	1.97
16ppm	M-13	Chloride	12	15.94	16.3
16ppm	M-13	Fluoride	12	15.88	16.32
16ppm	M-13	Formate	12	15.93	16.3
16ppm	M-13	Nitrate	12	16.12	16.57
16ppm	M-13	Nitrite	12	15.56	16.53
16ppm	M-13	Oxalate	12	16.01	16.33
16ppm	M-13	Phosphate	12	15.66	16.13
16ppm	M-13	Sulfate	12	16.03	16.47
16ppm	M-14	Chloride	12	16.09	16.32
16ppm	M-14	Fluoride	12	16.09	16.36
16ppm	M-14	Formate	12	16.04	16.41
16ppm	M-14	Nitrate	12	16.15	16.59
16ppm	M-14	Nitrite	12	15.9	16.52
16ppm	M-14	Oxalate	12	16.14	16.5
16ppm	M-14	Phosphate	12	15.43	15.74
16ppm	M-14	Sulfate	12	16	16.28

3.2 Full Set of Crosscheck Sample Results

The measurements generated by the crosscheck testing (i.e., Table A1) for the process samples along with standards that were included in the analytical protocols were imported into a JMP spreadsheet for analysis. A comparison of the precision of the two instruments is investigated first. Exhibits A6a-A6h provide statistical comparisons of the raw measurements by each instrument of the 2 ppm standards. In these exhibits, Levene’s test was used to identify a statistically significant difference in the variability of the measurements from the two instruments.^f Based upon the results of this test, there is no indication of a statistically significant difference between the variances of the measurements for any of the anions for the two instruments for the 2 ppm standard. Exhibits A7a-A7h provide statistical comparisons of the raw measurements by each instrument of the 16 ppm standards. Based upon the results of this test, there is no indication of a statistically significant difference between the variances of the measurements for any of the anions for the two instruments for the 16 ppm standard. Thus, these analyses indicate comparable precision for the two ICS-3000 instruments in the measurement of these standards.

A comparison of the relative bias between the two instruments is investigated next using the raw score differences (M-13 minus M-14) in ppm. A relative bias between the two instruments is indicated at the 5% significance level if zero is not within the 95% confidence interval presented as part of each exhibit. The larger, in absolute value, of the upper and lower limits for these confidence limits is a conservative bound at 95% confidence for the bias between the two instruments for the type of measurements represented in the exhibits. Exhibits A8a-A8h provide a look at all of the data for each anion in turn, with other exhibits (A8i through A8bt) providing a comparison for the measurements from the two instruments grouped by type of sample. From the analyses of all of the data, at the 5% significance level, the M-13 is biased high as compared to the M-14 for chloride, nitrate, phosphate, and sulfate, and the M-14 is biased high as compared to the M-13 for fluoride. Note that all of the available measurements for chloride, fluoride, and phosphate are from standards (compare Exhibits A8i, A8j, and A8s to Exhibits A8a, A8b, and A8g). For each of the other anions, various groupings of the measurements from the two instruments are compared. Table 3 provides the largest bounding (absolute) bias seen between the raw measurements from the two instruments over all of the exhibits from A8a through A8bt for each of the anions. The averages of the corresponding raw measurement of the M-13 instrument are also provided in this table along the biases expressed as percentages of these averages. The largest absolute bound for bias is 0.429 ppm for phosphate, which, when expressed as a relative bias to the average of the M-13 measurements (8.725 ppm), represents a bias of 4.9%. These results indicate no issues with the performance of the M-14 instrument.

Table 3. Bounds on Potential Absolute Biases between the M-13 and M-14 ICS-3000 Instruments at 95% Confidence

Anion	Chloride	Fluoride	Formate	Nitrate	Nitrite	Oxalate	Phosphate	Sulfate
Bias (ppm)	0.134	0.196	0.472	0.258	0.252	0.138	0.429	0.230
M-13 Average (ppm)	8.695	8.698	12.550	9.575	14.643	8.885	8.725	8.810
% Bias Relative to M-13 Average	1.5%	2.3%	3.8%	2.7%	1.7%	1.6%	4.9%	2.6%

^f The results from other statistical tests for equality of variance are also provided by JMP in these exhibits, but the conclusions made in this analysis utilized the results from Levene’s test.

3.3 Additional Analyses of the Standard Measurements

The measurements of the standards (2 ppm and 16 ppm) from Table A1 are revisited in this section to assess absolute bias for each of the ICS-3000 instruments. Exhibits A9a-A9p provide histograms and descriptive statistics for the raw score measurement data (in ppm) generated by the M-13 and M-14 ICS-3000 instruments for the 2- and 16-ppm standards. Each exhibit has the M-13 results followed by the M-14 results in column format.

The minimum and maximum measurements for each anion by each instrument are provided in these exhibits, and these values were summarized in Table 2. The exhibits also include a 95% confidence interval for the mean anion concentration for each instrument. An underlying assumption in the development of these confidence intervals is that the Central Limit Theorem applies for the data in each of these exhibits, and this appears to be a reasonable assumption for almost all of these data. For a given standard, if an instrument's confidence interval for an anion contains the nominal concentration (i.e., 2 or 16 ppm) for that anion, then that instrument is unbiased for that anion for that standard. Table 4 summarizes the confidence interval information. The biased results are shown in red in this table. The two instruments reveal biases that follow similar patterns for these standards, and the sizes of the biases for the two instruments seen in these data are comparable. The largest bias for the 2 ppm standards seen in this table is that for the M-13's oxalate data (2.15 ppm), which on a percentage basis is 7.5%; the largest bias for the 16 ppm standards seen in this table is that for the M-13's nitrate data (16.47 ppm), which on a percentage basis is only 2.9%. These results indicate that the biases seen in the M-14's measurement of these standards are of little practical concern in regards to its ability to provide reliable measurements for DWPF operations.

Table 4 95% Confidence Intervals for the Anion Mean Concentration (ppm) by Instrument

Results from the 2 ppm Standards								
Instrument	Chloride	Fluoride	Formate	Nitrate	Nitrite	Oxalate	Phosphate	Sulfate
M-13	1.97-1.99	2.00-2.03	1.99-2.02	1.95-2.00	2.00-2.04	2.12-2.15	1.98-2.09	1.99-2.03
M-14	1.90-1.93	2.02-2.04	2.00-2.04	1.88-1.94	1.99-2.04	2.08-2.11	1.92-1.99	1.94-1.96
Results from the 16 ppm Standards								
Instrument	Chloride	Fluoride	Formate	Nitrate	Nitrite	Oxalate	Phosphate	Sulfate
M-13	16.09-16.24	16.05-16.22	16.06-16.22	16.28-16.47	16.00-16.36	16.14-16.26	15.83-16.03	16.16-16.35
M-14	16.14-16.23	16.16-16.29	16.16-16.32	16.26-16.45	16.06-16.29	16.28-16.39	15.57-15.67	16.03-16.17

(Statistically significant biases at $\alpha=5\%$ are listed in red)

3.4 Simulants with Known Anion Concentrations

Measurements of the simulants with known anion concentrations are presented in Exhibits A10a through A10ae. Each exhibit has the M-13 results followed by the M-14 results in column format. The type of simulant and known anion concentration are presented as part of the header information in each of the exhibits. An investigation into the potential bias for each set of measurements is presented in the form of a 95% confidence interval for the mean of the measurements. If the known value for the simulant falls within the confidence interval, then there is no indication, at the 5% level, of a statistically significant bias. Based upon the results presented in this exhibit, there are some statistically significant biases in these measurements. For the simulants with 1 ppm known concentrations, the largest 95% confidence bound for the absolute value of the bias is that for the M-13's oxalate measurements, 1.110 ppm or 11%, corresponding to the measurements of the 5000X dilution of the SME simulant. For the simulants at a known concentration of 1.5 ppm, the largest

95% confidence bound for the absolute value of the bias is that for the M-14's nitrate measurements, 1.371 ppm or 8.6%, corresponding to the measurements of the 500X dilution of the SME simulant. For the simulants at a known concentration of 2.5 ppm, the largest 95% confidence bound for the absolute value of the bias is that for the M-13's phosphate measurements, 2.731 ppm or 9.2%, corresponding to the measurements of the 500X dilution of the SME simulant. For these simulants with known concentrations of 6 ppm or larger, the largest 95% confidence bound for the absolute value of the bias is that for the M-13's formate measurements, 53.71 ppm or 10.6%, corresponding to the measurements of the 500X dilution of the SME simulant with a reference value of 60 ppm for formate. Since the calibrations of the instruments are only to 20 ppm, the bias confidence limit of 10.6% for 60 ppm concentrations is indicative of a reasonably linear response curve beyond the calibration interval. The results from these investigations indicate that the biases seen in the M-14's measurement of these simulants are of little practical concern in regards to its ability to provide reliable measurements for DWPF operations.

3.5 Calibration Standards – Measured as Samples

Linear regressions of the measured values versus the reference values for each anion were conducted for the measurements generated by processing the calibration standards as samples (i.e., the data shown in Exhibits 4a through 4c). These results are provided for each anion for each instrument in Exhibits A11a through A11p. The coefficient of determination, R^2 , value is provided for each of the regressions. This value represents the fraction of the variation of the measurements that is explained by the regression equation. The closer this value is to 1 the better. The R^2 values shown in these exhibits are all 0.999⁺. Also shown in these exhibits are 95% confidence intervals for the intercept and slope of each of the fitted equations. Ideally, 0 should be in or near the confidence interval for each y-intercept, and 1 should be in or near the confidence interval for each slope. This is the case for each of these regressions.

A “Lack of Fit” test for the adequacy of a linear model to fit the measurement data for each of the regressions is also provided. That is, for each anion and for each instrument, the test addresses the question: Is there an indication of a need for a quadratic model instead of a simple, linear model to explain the relationship between the reference and measured values? A statistically significant, at the 5% level, lack of fit is indicated in the “Lack of Fit” tabulated output by a “**Prob > F**” value of 0.05 or smaller. Over all of these results, only the phosphate and sulfate results for the M-13 instrument show any statistically significant lack of fit. For both phosphate and sulfate, the linear fit slightly under predicts the measured values (i.e., the measured values are slightly higher than the values of the fitted equation). These results raise no issues of practical concern, and certainly provide no indication of an issue with the performance of the M-14 instrument.

3.6 Standards Prepared from Dried Salts

Exhibits A12a and A12b provide statistical analyses of the limited data generated by the measurement of the standards prepared from dried salts. These are the data shown in Exhibit A5. For the M-13, all of the measurements fall between 9.63 and 10.15 ppm, and for the M-14, all of the measurements fall between 9.54 and 10.58 ppm. For each of the two instruments, there are statistically significant, at the 5% level, differences among the measurement means for the anions of interest. These differences are not seen as raising any practical concern regarding the performance of the M-14 instrument.

4.0 CONCLUSIONS AND RECOMMENDATIONS

The test results of the evaluation of the ICS-3000 in M-14 indicate that the performance of this new instrument is comparable to the performance of the M-13 instrument. Thus, the ICS-3000 system

installed in 221-S M-14 is recommended for use at the DWPF Lab and is, thus, deemed qualified for such use. The qualification testing was a head-to-head comparison of the M-14 ICS-3000 instrument with the M-13 ICS-3000 system. The crosscheck work included standards for instrument calibration and calibration verifications and standards for individual anion analysis, which were NIST traceable. In addition the crosscheck work included the preparation of simulated SRAT Receipt, SRAT Product, and SME samples, along with actual Sludge Batch 5 material from the SRAT and SME tanks.

5.0 REFERENCES

- [1] Mahannah, RN, "Technical Task Request: Perform Data Evaluation from the New ICS-3000 Ion Chromatography Systems versus the Current DX-500 IC," HLW/DWPF/TTR-2007-0023, Revision 0, August 2, 2007.
- [2] Edwards, TB, "Task Technical & QA Plan: Perform Data Evaluation of the New ICS-300 Ion Chromatography Systems versus the Current DX-500 Systems," WSRC-STI-2007000449, Revision 0, August 27, 2007.
- [3] Mahannah, RN and TB Edwards, "Qualification of the First ICS-3000 Ion Chromatograph for Use at the Defense Waste Processing Facility," SRNL-STI-2009-00323, Revision 0, June 2009.
- [4] JMP Version 7.0.2, SAS Institute, Inc., Cary NC, 1989-2007.

Appendix A. Tables and Exhibits

Table A1. Measurements of Standards and SRAT Receipt (SR), SRAT Product (SP), and SME Samples

Date	Nominal DF	Tank	Sample Number	Type of Sample	Bottle ID	Anion	DF	M-13 ICS3000 raw (ppm)	M-14 ICS3000 raw (ppm)	M-13 ICS3000 FINAL (ppm)	M-14 ICS3000 FINAL (ppm)
09/22/2009	1	SR	16367	standard	2ppm	Fluoride	1	2.04	2.05	2.04	2.05
09/22/2009	1	SR	16367	standard	2ppm	Formate	1	2.01	2.01	2.01	2.01
09/22/2009	1	SR	16367	standard	2ppm	Chloride	1	2	1.93	2	1.93
09/22/2009	1	SR	16367	standard	2ppm	Nitrite	1	2.04	1.99	2.04	1.99
09/22/2009	1	SR	16367	standard	2ppm	Nitrate	1	2.03	1.93	2.03	1.93
09/22/2009	1	SR	16367	standard	2ppm	Sulfate	1	2.05	1.97	2.05	1.97
09/22/2009	1	SR	16367	standard	2ppm	Oxalate	1	2.17	2.11	2.17	2.11
09/22/2009	1	SR	16367	standard	2ppm	Phosphate	1	2.07	1.99	2.07	1.99
09/22/2009	1	SR	16367	standard	16ppm	Fluoride	1	16.24	16.34	16.24	16.34
09/22/2009	1	SR	16367	standard	16ppm	Formate	1	16	16.1	16	16.1
09/22/2009	1	SR	16367	standard	16ppm	Chloride	1	16.29	16.25	16.29	16.25
09/22/2009	1	SR	16367	standard	16ppm	Nitrite	1	16.17	16.06	16.17	16.06
09/22/2009	1	SR	16367	standard	16ppm	Nitrate	1	16.56	16.48	16.56	16.48
09/22/2009	1	SR	16367	standard	16ppm	Sulfate	1	16.44	16.24	16.44	16.24
09/22/2009	1	SR	16367	standard	16ppm	Oxalate	1	16.3	16.3	16.3	16.3
09/22/2009	1	SR	16367	standard	16ppm	Phosphate	1	16.13	15.63	16.13	15.63
09/22/2009	5000	SR	16367	process	5893	Fluoride	5107.72157	.	.	.	.
09/22/2009	5000	SR	16367	process	5893	Formate	5107.72157	.	.	.	.
09/22/2009	5000	SR	16367	process	5893	Chloride	5107.72157	.	.	.	.
09/22/2009	5000	SR	16367	process	5893	Nitrite	5107.72157	.	.	.	.
09/22/2009	5000	SR	16367	process	5893	Nitrate	5107.72157	.	.	.	.
09/22/2009	5000	SR	16367	process	5893	Sulfate	5107.72157	.	.	.	.
09/22/2009	5000	SR	16367	process	5893	Oxalate	5107.72157	.	.	.	.
09/22/2009	5000	SR	16367	process	5893	Phosphate	5107.72157	.	.	.	.
09/22/2009	5000	SR	16367	process	5895	Fluoride	5122.99578	.	.	.	.
09/22/2009	5000	SR	16367	process	5895	Formate	5122.99578	.	.	.	.
09/22/2009	5000	SR	16367	process	5895	Chloride	5122.99578	.	.	.	.
09/22/2009	5000	SR	16367	process	5895	Nitrite	5122.99578	.	.	.	.
09/22/2009	5000	SR	16367	process	5895	Nitrate	5122.99578	.	.	.	.
09/22/2009	5000	SR	16367	process	5895	Sulfate	5122.99578	.	.	.	.
09/22/2009	5000	SR	16367	process	5895	Oxalate	5122.99578	.	.	.	.
09/22/2009	5000	SR	16367	process	5895	Phosphate	5122.99578	.	.	.	.
09/22/2009	5000	SR	16367	process	5896	Fluoride	5132.81459	.	.	.	.
09/22/2009	5000	SR	16367	process	5896	Formate	5132.81459	.	.	.	.
09/22/2009	5000	SR	16367	process	5896	Chloride	5132.81459	.	.	.	.
09/22/2009	5000	SR	16367	process	5896	Nitrite	5132.81459	.	.	.	.
09/22/2009	5000	SR	16367	process	5896	Nitrate	5132.81459	.	.	.	.
09/22/2009	5000	SR	16367	process	5896	Sulfate	5132.81459	.	.	.	.
09/22/2009	5000	SR	16367	process	5896	Oxalate	5132.81459	.	.	.	.
09/22/2009	5000	SR	16367	process	5896	Phosphate	5132.81459	.	.	.	.
09/22/2009	5000	SR	16367	process	5897	Fluoride	5268.9964	.	.	.	.
09/22/2009	5000	SR	16367	process	5897	Formate	5268.9964	1.58	1.53	.	.
09/22/2009	5000	SR	16367	process	5897	Chloride	5268.9964	.	.	.	.
09/22/2009	5000	SR	16367	process	5897	Nitrite	5268.9964	1.67	1.7	.	.
09/22/2009	5000	SR	16367	process	5897	Nitrate	5268.9964	1.9	1.96	.	.
09/22/2009	5000	SR	16367	process	5897	Sulfate	5268.9964	.	.	.	.
09/22/2009	5000	SR	16367	process	5897	Oxalate	5268.9964	.	.	.	.
09/22/2009	5000	SR	16367	process	5897	Phosphate	5268.9964	.	.	.	.
09/22/2009	16	SR	16367	standard	9999	Fluoride	2	8.16	8.16	102.01	102.01
09/22/2009	16	SR	16367	standard	9999	Formate	2	8.99	8.95	102.52	102.37
09/22/2009	16	SR	16367	standard	9999	Chloride	2	8.17	8.05	102.08	100.66

Table A1. Measurements of Standards and SRAT Receipt (SR), SRAT Product (SP), and SME Samples

Date	Nominal DF	Tank	Sample Number	Type of Sample	Bottle ID	Anion	DF	M-13 ICS3000 raw (ppm)	M-14 ICS3000 raw (ppm)	M-13 ICS3000 FINAL (ppm)	M-14 ICS3000 FINAL (ppm)
09/22/2009	16	SR	16367	standard	9999	Nitrite	2	8.88	8.8	100.58	99.33
09/22/2009	16	SR	16367	standard	9999	Nitrate	2	9.35	9	104.98	100.28
09/22/2009	16	SR	16367	standard	9999	Sulfate	2	8.37	8.15	104.59	101.87
09/22/2009	16	SR	16367	standard	9999	Oxalate	2	8.37	8.35	104.61	104.41
09/22/2009	16	SR	16367	standard	9999	Phosphate	2	8.04	7.71	100.48	96.43
09/22/2009	500	SR	16367	process	5886	Fluoride	508.335201	.	.	.	.
09/22/2009	500	SR	16367	process	5886	Formate	508.335201	16.09	15.81	8179	8037
09/22/2009	500	SR	16367	process	5886	Chloride	508.335201	.	.	.	.
09/22/2009	500	SR	16367	process	5886	Nitrite	508.335201	17.57	17.34	8931	8815
09/22/2009	500	SR	16367	process	5886	Nitrate	508.335201	19.93	19.68	10131	10004
09/22/2009	500	SR	16367	process	5886	Sulfate	508.335201	1.33	1.23	678	627
09/22/2009	500	SR	16367	process	5886	Oxalate	508.335201	2.88	2.82	1463	1431
09/22/2009	500	SR	16367	process	5886	Phosphate	508.335201	.	.	.	.
09/22/2009	500	SR	16367	process	5887	Fluoride	493.263423	.	.	.	.
09/22/2009	500	SR	16367	process	5887	Formate	493.263423	16.61	15.78	8194	7784
09/22/2009	500	SR	16367	process	5887	Chloride	493.263423	.	.	.	.
09/22/2009	500	SR	16367	process	5887	Nitrite	493.263423	18.17	17.82	8963	8790
09/22/2009	500	SR	16367	process	5887	Nitrate	493.263423	20.59	20.46	10156	10092
09/22/2009	500	SR	16367	process	5887	Sulfate	493.263423	1.33	1.33	654	658
09/22/2009	500	SR	16367	process	5887	Oxalate	493.263423	2.96	2.92	1461	1441
09/22/2009	500	SR	16367	process	5887	Phosphate	493.263423	.	.	.	.
09/22/2009	500	SR	16367	process	5888	Fluoride	504.680603	.	.	.	.
09/22/2009	500	SR	16367	process	5888	Formate	504.680603	16.33	15.38	8241	7763
09/22/2009	500	SR	16367	process	5888	Chloride	504.680603	.	.	.	.
09/22/2009	500	SR	16367	process	5888	Nitrite	504.680603	17.8	17.38	8982	8771
09/22/2009	500	SR	16367	process	5888	Nitrate	504.680603	20.22	19.9	10205	10043
09/22/2009	500	SR	16367	process	5888	Sulfate	504.680603	1.29	1.24	650	627
09/22/2009	500	SR	16367	process	5888	Oxalate	504.680603	2.92	2.84	1472	1432
09/22/2009	500	SR	16367	process	5888	Phosphate	504.680603	.	.	.	.
09/22/2009	500	SR	16367	process	5889	Fluoride	509.219796	.	.	.	.
09/22/2009	500	SR	16367	process	5889	Formate	509.219796	15.45	15.22	7869	7749
09/22/2009	500	SR	16367	process	5889	Chloride	509.219796	.	.	.	.
09/22/2009	500	SR	16367	process	5889	Nitrite	509.219796	17.55	17.38	8937	8850
09/22/2009	500	SR	16367	process	5889	Nitrate	509.219796	19.93	19.67	10149	10016
09/22/2009	500	SR	16367	process	5889	Sulfate	509.219796	1.29	1.25	657	635
09/22/2009	500	SR	16367	process	5889	Oxalate	509.219796	2.86	2.83	1456	1440
09/22/2009	500	SR	16367	process	5889	Phosphate	509.219796	.	.	.	.
09/22/2009	500	SR	16367	standard	2ppm	Fluoride	1	2.04	2.04	2.04	2.04
09/22/2009	500	SR	16367	standard	2ppm	Formate	1	2	1.98	2	1.98
09/22/2009	500	SR	16367	standard	2ppm	Chloride	1	2	1.94	2	1.94
09/22/2009	500	SR	16367	standard	2ppm	Nitrite	1	2.04	2.07	2.04	2.07
09/22/2009	500	SR	16367	standard	2ppm	Nitrate	1	2.01	2.01	2.01	2.01
09/22/2009	500	SR	16367	standard	2ppm	Sulfate	1	2.01	1.96	2.01	1.96
09/22/2009	500	SR	16367	standard	2ppm	Oxalate	1	2.13	2.11	2.13	2.11
09/22/2009	500	SR	16367	standard	2ppm	Phosphate	1	1.94	1.96	1.94	1.96
09/22/2009	500	SR	16367	standard	16ppm	Fluoride	1	16.25	16.36	16.25	16.36
09/22/2009	500	SR	16367	standard	16ppm	Formate	1	16.03	16.24	16.03	16.24
09/22/2009	500	SR	16367	standard	16ppm	Chloride	1	16.29	16.27	16.29	16.27
09/22/2009	500	SR	16367	standard	16ppm	Nitrite	1	16.13	16.14	16.13	16.14
09/22/2009	500	SR	16367	standard	16ppm	Nitrate	1	16.51	16.52	16.51	16.52
09/22/2009	500	SR	16367	standard	16ppm	Sulfate	1	16.38	16.24	16.38	16.24

Table A1. Measurements of Standards and SRAT Receipt (SR), SRAT Product (SP), and SME Samples

Date	Nominal DF	Tank	Sample Number	Type of Sample	Bottle ID	Anion	DF	M-13 ICS3000 raw (ppm)	M-14 ICS3000 raw (ppm)	M-13 ICS3000 FINAL (ppm)	M-14 ICS3000 FINAL (ppm)
09/22/2009	500	SR	16367	standard	16ppm	Oxalate	1	16.27	16.38	16.27	16.38
09/22/2009	500	SR	16367	standard	16ppm	Phosphate	1	15.89	15.67	15.89	15.67
09/29/2009	.	SR	16507	standard	2ppm	Fluoride	1	1.98	2.04	1.98	2.04
09/29/2009	.	SR	16507	standard	2ppm	Formate	1	2	2.03	2	2.03
09/29/2009	.	SR	16507	standard	2ppm	Chloride	1	1.95	1.93	1.95	1.93
09/29/2009	.	SR	16507	standard	2ppm	Nitrite	1	1.98	2.02	1.98	2.02
09/29/2009	.	SR	16507	standard	2ppm	Nitrate	1	1.93	1.88	1.93	1.88
09/29/2009	.	SR	16507	standard	2ppm	Sulfate	1	2	1.96	2	1.96
09/29/2009	.	SR	16507	standard	2ppm	Oxalate	1	2.14	2.11	2.14	2.11
09/29/2009	.	SR	16507	standard	2ppm	Phosphate	1	2.06	2.02	2.06	2.02
09/29/2009	.	SR	16507	standard	16ppm	Fluoride	1	16.1	16.16	16.1	16.16
09/29/2009	.	SR	16507	standard	16ppm	Formate	1	16.15	16.31	16.15	16.31
09/29/2009	.	SR	16507	standard	16ppm	Chloride	1	16.13	16.15	16.13	16.15
09/29/2009	.	SR	16507	standard	16ppm	Nitrite	1	16.15	15.92	16.15	15.92
09/29/2009	.	SR	16507	standard	16ppm	Nitrate	1	16.32	16.36	16.32	16.36
09/29/2009	.	SR	16507	standard	16ppm	Sulfate	1	16.21	16.01	16.21	16.01
09/29/2009	.	SR	16507	standard	16ppm	Oxalate	1	16.21	16.36	16.21	16.36
09/29/2009	.	SR	16507	standard	16ppm	Phosphate	1	16.09	15.65	16.09	15.65
09/29/2009	5000	SR	16507	process	6338	Fluoride	4976.90316	.	.	.	.
09/29/2009	5000	SR	16507	process	6338	Formate	4976.90316	.	.	.	.
09/29/2009	5000	SR	16507	process	6338	Chloride	4976.90316	.	.	.	.
09/29/2009	5000	SR	16507	process	6338	Nitrite	4976.90316	.	.	.	.
09/29/2009	5000	SR	16507	process	6338	Nitrate	4976.90316	.	.	.	.
09/29/2009	5000	SR	16507	process	6338	Sulfate	4976.90316	.	.	.	.
09/29/2009	5000	SR	16507	process	6338	Oxalate	4976.90316	.	.	.	.
09/29/2009	5000	SR	16507	process	6338	Phosphate	4976.90316	.	.	.	.
09/29/2009	5000	SR	16507	process	6339	Fluoride	4957.00335	.	.	.	.
09/29/2009	5000	SR	16507	process	6339	Formate	4957.00335	.	.	.	.
09/29/2009	5000	SR	16507	process	6339	Chloride	4957.00335	.	.	.	.
09/29/2009	5000	SR	16507	process	6339	Nitrite	4957.00335	.	.	.	.
09/29/2009	5000	SR	16507	process	6339	Nitrate	4957.00335	.	.	.	.
09/29/2009	5000	SR	16507	process	6339	Sulfate	4957.00335	.	.	.	.
09/29/2009	5000	SR	16507	process	6339	Oxalate	4957.00335	.	.	.	.
09/29/2009	5000	SR	16507	process	6339	Phosphate	4957.00335	.	.	.	.
09/29/2009	5000	SR	16507	process	6341	Fluoride	4973.69723	.	.	.	.
09/29/2009	5000	SR	16507	process	6341	Formate	4973.69723	.	.	.	.
09/29/2009	5000	SR	16507	process	6341	Chloride	4973.69723	.	.	.	.
09/29/2009	5000	SR	16507	process	6341	Nitrite	4973.69723	.	.	.	.
09/29/2009	5000	SR	16507	process	6341	Nitrate	4973.69723	.	.	.	.
09/29/2009	5000	SR	16507	process	6341	Sulfate	4973.69723	.	.	.	.
09/29/2009	5000	SR	16507	process	6341	Oxalate	4973.69723	.	.	.	.
09/29/2009	5000	SR	16507	process	6341	Phosphate	4973.69723	.	.	.	.
09/29/2009	5000	SR	16507	process	6342	Fluoride	5100.93415	.	.	.	.
09/29/2009	5000	SR	16507	process	6342	Formate	5100.93415	1.45	1.45	.	.
09/29/2009	5000	SR	16507	process	6342	Chloride	5100.93415	.	.	.	.
09/29/2009	5000	SR	16507	process	6342	Nitrite	5100.93415	1.75	1.65	.	.
09/29/2009	5000	SR	16507	process	6342	Nitrate	5100.93415	1.88	1.78	.	.
09/29/2009	5000	SR	16507	process	6342	Sulfate	5100.93415	.	.	.	.
09/29/2009	5000	SR	16507	process	6342	Oxalate	5100.93415	.	.	.	.
09/29/2009	5000	SR	16507	process	6342	Phosphate	5100.93415	.	.	.	.
09/29/2009	16	SR	16507	standard	9999	Fluoride	2	8.1	8.16	101.25	102.05

Table A1. Measurements of Standards and SRAT Receipt (SR), SRAT Product (SP), and SME Samples

Date	Nominal DF	Tank	Sample Number	Type of Sample	Bottle ID	Anion	DF	M-13 ICS3000 raw (ppm)	M-14 ICS3000 raw (ppm)	M-13 ICS3000 FINAL (ppm)	M-14 ICS3000 FINAL (ppm)
09/29/2009	16	SR	16507	standard	9999	Formate	2	8.83	9.19	101.39	105.87
09/29/2009	16	SR	16507	standard	9999	Chloride	2	8.07	8.05	100.84	100.58
09/29/2009	16	SR	16507	standard	9999	Nitrite	2	8.99	9	101.42	102.22
09/29/2009	16	SR	16507	standard	9999	Nitrate	2	9.14	9.16	102.44	103.42
09/29/2009	16	SR	16507	standard	9999	Sulfate	2	8.2	8.07	102.5	100.94
09/29/2009	16	SR	16507	standard	9999	Oxalate	2	8.4	8.43	104.98	105.39
09/29/2009	16	SR	16507	standard	9999	Phosphate	2	8.1	7.76	101.25	97.05
09/29/2009	500	SR	16507	process	6313	Fluoride	488.348334	.	.	.	.
09/29/2009	500	SR	16507	process	6313	Formate	488.348334	14.84	14.93	7249	7290
09/29/2009	500	SR	16507	process	6313	Chloride	488.348334	.	.	.	.
09/29/2009	500	SR	16507	process	6313	Nitrite	488.348334	18.42	18.33	8995	8953
09/29/2009	500	SR	16507	process	6313	Nitrate	488.348334	19.38	19.23	9463	9393
09/29/2009	500	SR	16507	process	6313	Sulfate	488.348334	1.26	1.22	614	594
09/29/2009	500	SR	16507	process	6313	Oxalate	488.348334	2.48	2.42	1213	1182
09/29/2009	500	SR	16507	process	6313	Phosphate	488.348334	.	.	.	.
09/29/2009	500	SR	16507	process	6318	Fluoride	487.330122	.	.	.	.
09/29/2009	500	SR	16507	process	6318	Formate	487.330122	14.65	14.75	7137	7189
09/29/2009	500	SR	16507	process	6318	Chloride	487.330122	.	.	.	.
09/29/2009	500	SR	16507	process	6318	Nitrite	487.330122	18.15	18.14	8847	8840
09/29/2009	500	SR	16507	process	6318	Nitrate	487.330122	19.1	18.99	9306	9257
09/29/2009	500	SR	16507	process	6318	Sulfate	487.330122	1.27	1.2	620	583
09/29/2009	500	SR	16507	process	6318	Oxalate	487.330122	2.47	2.39	1204	1164
09/29/2009	500	SR	16507	process	6318	Phosphate	487.330122	.	.	.	.
09/29/2009	500	SR	16507	process	6319	Fluoride	495.459741	.	.	.	.
09/29/2009	500	SR	16507	process	6319	Formate	495.459741	14.23	14.36	7050	7114
09/29/2009	500	SR	16507	process	6319	Chloride	495.459741	.	.	.	.
09/29/2009	500	SR	16507	process	6319	Nitrite	495.459741	17.65	17.57	8744	8705
09/29/2009	500	SR	16507	process	6319	Nitrate	495.459741	18.53	18.44	9179	9136
09/29/2009	500	SR	16507	process	6319	Sulfate	495.459741	1.2	1.16	596	573
09/29/2009	500	SR	16507	process	6319	Oxalate	495.459741	2.38	2.31	1179	1143
09/29/2009	500	SR	16507	process	6319	Phosphate	495.459741	.	.	.	.
09/29/2009	500	SR	16507	process	6326	Fluoride	505.735225	.	.	.	.
09/29/2009	500	SR	16507	process	6326	Formate	505.735225	14.27	14.43	7219	7297
09/29/2009	500	SR	16507	process	6326	Chloride	505.735225	.	.	.	.
09/29/2009	500	SR	16507	process	6326	Nitrite	505.735225	17.7	17.64	8953	8920
09/29/2009	500	SR	16507	process	6326	Nitrate	505.735225	18.57	18.49	9391	9350
09/29/2009	500	SR	16507	process	6326	Sulfate	505.735225	1.2	1.16	605	588
09/29/2009	500	SR	16507	process	6326	Oxalate	505.735225	2.38	2.31	1201	1168
09/29/2009	500	SR	16507	process	6326	Phosphate	505.735225	.	.	.	.
09/29/2009	500	SR	16507	standard	2ppm	Fluoride	1	1.98	1.99	1.98	1.99
09/29/2009	500	SR	16507	standard	2ppm	Formate	1	2	2.01	2	2.01
09/29/2009	500	SR	16507	standard	2ppm	Chloride	1	1.95	1.89	1.95	1.89
09/29/2009	500	SR	16507	standard	2ppm	Nitrite	1	1.97	2	1.97	2
09/29/2009	500	SR	16507	standard	2ppm	Nitrate	1	1.91	1.83	1.91	1.83
09/29/2009	500	SR	16507	standard	2ppm	Sulfate	1	1.98	1.91	1.98	1.91
09/29/2009	500	SR	16507	standard	2ppm	Oxalate	1	2.12	2.06	2.12	2.06
09/29/2009	500	SR	16507	standard	2ppm	Phosphate	1	1.95	1.86	1.95	1.86
09/29/2009	500	SR	16507	standard	16ppm	Fluoride	1	16.15	16.22	16.15	16.22
09/29/2009	500	SR	16507	standard	16ppm	Formate	1	16.25	16.41	16.25	16.41
09/29/2009	500	SR	16507	standard	16ppm	Chloride	1	16.16	16.16	16.16	16.16
09/29/2009	500	SR	16507	standard	16ppm	Nitrite	1	16.12	16.28	16.12	16.28

Table A1. Measurements of Standards and SRAT Receipt (SR), SRAT Product (SP), and SME Samples

Date	Nominal DF	Tank	Sample Number	Type of Sample	Bottle ID	Anion	DF	M-13 ICS3000 raw (ppm)	M-14 ICS3000 raw (ppm)	M-13 ICS3000 FINAL (ppm)	M-14 ICS3000 FINAL (ppm)
09/29/2009	500	SR	16507	standard	16ppm	Nitrate	1	16.27	16.25	16.27	16.25
09/29/2009	500	SR	16507	standard	16ppm	Sulfate	1	16.18	16	16.18	16
09/29/2009	500	SR	16507	standard	16ppm	Oxalate	1	16.25	16.39	16.25	16.39
09/29/2009	500	SR	16507	standard	16ppm	Phosphate	1	15.92	15.43	15.92	15.43
09/18/2009	.	SP	16300	standard	2ppm	Fluoride	1	2.02	2.02	2.02	2.02
09/18/2009	.	SP	16300	standard	2ppm	Formate	1	2.01	1.98	2.01	1.98
09/18/2009	.	SP	16300	standard	2ppm	Chloride	1	1.99	1.9	1.99	1.9
09/18/2009	.	SP	16300	standard	2ppm	Nitrite	1	2.03	2.02	2.03	2.02
09/18/2009	.	SP	16300	standard	2ppm	Nitrate	1	2	1.86	2	1.86
09/18/2009	.	SP	16300	standard	2ppm	Sulfate	1	2.04	1.94	2.04	1.94
09/18/2009	.	SP	16300	standard	2ppm	Oxalate	1	2.15	2.07	2.15	2.07
09/18/2009	.	SP	16300	standard	2ppm	Phosphate	1	2.21	1.96	2.21	1.96
09/18/2009	.	SP	16300	standard	16ppm	Fluoride	1	16.14	16.17	16.14	16.17
09/18/2009	.	SP	16300	standard	16ppm	Formate	1	16.05	16.04	16.05	16.04
09/18/2009	.	SP	16300	standard	16ppm	Chloride	1	16.17	16.12	16.17	16.12
09/18/2009	.	SP	16300	standard	16ppm	Nitrite	1	16.45	16.3	16.45	16.3
09/18/2009	.	SP	16300	standard	16ppm	Nitrate	1	16.45	16.15	16.45	16.15
09/18/2009	.	SP	16300	standard	16ppm	Sulfate	1	16.35	16.08	16.35	16.08
09/18/2009	.	SP	16300	standard	16ppm	Oxalate	1	16.12	16.14	16.12	16.14
09/18/2009	.	SP	16300	standard	16ppm	Phosphate	1	16.02	15.53	16.02	15.53
09/18/2009	5000	SP	16300	process	5586	Fluoride	5056.51438	.	.	.	.
09/18/2009	5000	SP	16300	process	5586	Formate	5056.51438	8.04	7.88	40647	39821
09/18/2009	5000	SP	16300	process	5586	Chloride	5056.51438	.	.	.	.
09/18/2009	5000	SP	16300	process	5586	Nitrite	5056.51438	.	.	.	.
09/18/2009	5000	SP	16300	process	5586	Nitrate	5056.51438	4.23	4.07	21389	20593
09/18/2009	5000	SP	16300	process	5586	Sulfate	5056.51438	.	.	.	.
09/18/2009	5000	SP	16300	process	5586	Oxalate	5056.51438	.	.	.	.
09/18/2009	5000	SP	16300	process	5586	Phosphate	5056.51438	.	.	.	.
09/18/2009	5000	SP	16300	process	5587	Fluoride	4908.78064	.	.	.	.
09/18/2009	5000	SP	16300	process	5587	Formate	4908.78064	8.2	8.05	40268	39516
09/18/2009	5000	SP	16300	process	5587	Chloride	4908.78064	.	.	.	.
09/18/2009	5000	SP	16300	process	5587	Nitrite	4908.78064	.	.	.	.
09/18/2009	5000	SP	16300	process	5587	Nitrate	4908.78064	4.34	4.21	21280	20651
09/18/2009	5000	SP	16300	process	5587	Sulfate	4908.78064	.	.	.	.
09/18/2009	5000	SP	16300	process	5587	Oxalate	4908.78064	.	.	.	.
09/18/2009	5000	SP	16300	process	5587	Phosphate	4908.78064	.	.	.	.
09/18/2009	5000	SP	16300	process	5588	Fluoride	5099.93806	.	.	.	.
09/18/2009	5000	SP	16300	process	5588	Formate	5099.93806	7.95	7.81	40537	39812
09/18/2009	5000	SP	16300	process	5588	Chloride	5099.93806	.	.	.	.
09/18/2009	5000	SP	16300	process	5588	Nitrite	5099.93806	.	.	.	.
09/18/2009	5000	SP	16300	process	5588	Nitrate	5099.93806	4.21	4.08	21488	20793
09/18/2009	5000	SP	16300	process	5588	Sulfate	5099.93806	.	.	.	.
09/18/2009	5000	SP	16300	process	5588	Oxalate	5099.93806	.	.	.	.
09/18/2009	5000	SP	16300	process	5588	Phosphate	5099.93806	.	.	.	.
09/18/2009	5000	SP	16300	process	5589	Fluoride	4934.77835	.	.	.	.
09/18/2009	5000	SP	16300	process	5589	Formate	4934.77835	8.18	8.07	40360	39821
09/18/2009	5000	SP	16300	process	5589	Chloride	4934.77835	.	.	.	.
09/18/2009	5000	SP	16300	process	5589	Nitrite	4934.77835	.	.	.	.
09/18/2009	5000	SP	16300	process	5589	Nitrate	4934.77835	4.35	4.19	21480	20683
09/18/2009	5000	SP	16300	process	5589	Sulfate	4934.77835	.	.	.	.
09/18/2009	5000	SP	16300	process	5589	Oxalate	4934.77835	.	.	.	.

Table A1. Measurements of Standards and SRAT Receipt (SR), SRAT Product (SP), and SME Samples

Date	Nominal DF	Tank	Sample Number	Type of Sample	Bottle ID	Anion	DF	M-13 ICS3000 raw (ppm)	M-14 ICS3000 raw (ppm)	M-13 ICS3000 FINAL (ppm)	M-14 ICS3000 FINAL (ppm)
09/18/2009	5000	SP	16300	process	5589	Phosphate	4934.77835	.	.	.	.
09/18/2009	16	SP	16300	standard	9999	Fluoride	2	8.1	8.08	101.29	101.01
09/18/2009	16	SP	16300	standard	9999	Formate	2	12.1	12.07	100.12	100.45
09/18/2009	16	SP	16300	standard	9999	Chloride	2	8.1	8	101.24	99.95
09/18/2009	16	SP	16300	standard	9999	Nitrite	2	8.2	8.15	102.45	101.83
09/18/2009	16	SP	16300	standard	9999	Nitrate	2	10.44	10.26	103.34	102.06
09/18/2009	16	SP	16300	standard	9999	Sulfate	2	8.27	8.06	103.35	100.75
09/18/2009	16	SP	16300	standard	9999	Oxalate	2	8.23	8.18	102.85	102.2
09/18/2009	16	SP	16300	standard	9999	Phosphate	2	8.02	7.71	100.21	96.32
09/18/2009	500	SP	16300	process	5579	Fluoride	507.15014	.	.	.	.
09/18/2009	500	SP	16300	process	5579	Formate	507.15014	.	.	0	0
09/18/2009	500	SP	16300	process	5579	Chloride	507.15014	.	.	0	0
09/18/2009	500	SP	16300	process	5579	Nitrite	507.15014	.	.	.	.
09/18/2009	500	SP	16300	process	5579	Nitrate	507.15014	.	.	.	.
09/18/2009	500	SP	16300	process	5579	Sulfate	507.15014	1.26	1.22	637	621
09/18/2009	500	SP	16300	process	5579	Oxalate	507.15014	.	.	.	.
09/18/2009	500	SP	16300	process	5579	Phosphate	507.15014	.	.	.	.
09/18/2009	500	SP	16300	process	5580	Fluoride	495.912676	.	.	.	.
09/18/2009	500	SP	16300	process	5580	Formate	495.912676	.	.	0	0
09/18/2009	500	SP	16300	process	5580	Chloride	495.912676	.	.	0	0
09/18/2009	500	SP	16300	process	5580	Nitrite	495.912676	.	.	.	.
09/18/2009	500	SP	16300	process	5580	Nitrate	495.912676	.	.	.	.
09/18/2009	500	SP	16300	process	5580	Sulfate	495.912676	1.27	1.26	632	623
09/18/2009	500	SP	16300	process	5580	Oxalate	495.912676	.	.	.	.
09/18/2009	500	SP	16300	process	5580	Phosphate	495.912676	.	.	.	.
09/18/2009	500	SP	16300	process	5581	Fluoride	508.733471	.	.	.	.
09/18/2009	500	SP	16300	process	5581	Formate	508.733471	.	.	0	0
09/18/2009	500	SP	16300	process	5581	Chloride	508.733471	.	.	0	0
09/18/2009	500	SP	16300	process	5581	Nitrite	508.733471	.	.	.	.
09/18/2009	500	SP	16300	process	5581	Nitrate	508.733471	.	.	.	.
09/18/2009	500	SP	16300	process	5581	Sulfate	508.733471	1.24	1.21	631	617
09/18/2009	500	SP	16300	process	5581	Oxalate	508.733471	.	.	.	.
09/18/2009	500	SP	16300	process	5581	Phosphate	508.733471	.	.	.	.
09/18/2009	500	SP	16300	process	5582	Fluoride	504.143535	.	.	.	.
09/18/2009	500	SP	16300	process	5582	Formate	504.143535	.	.	0	0
09/18/2009	500	SP	16300	process	5582	Chloride	504.143535	.	.	0	0
09/18/2009	500	SP	16300	process	5582	Nitrite	504.143535	.	.	.	.
09/18/2009	500	SP	16300	process	5582	Nitrate	504.143535	.	.	.	.
09/18/2009	500	SP	16300	process	5582	Sulfate	504.143535	1.25	1.23	628	622
09/18/2009	500	SP	16300	process	5582	Oxalate	504.143535	.	.	.	.
09/18/2009	500	SP	16300	process	5582	Phosphate	504.143535	.	.	.	.
09/18/2009	500	SR	16300	standard	2ppm	Fluoride	1	2.02	2.01	2.02	2.01
09/18/2009	500	SR	16300	standard	2ppm	Formate	1	2.01	2.04	2.01	2.04
09/18/2009	500	SR	16300	standard	2ppm	Chloride	1	1.97	1.89	1.97	1.89
09/18/2009	500	SR	16300	standard	2ppm	Nitrite	1	2.02	2.03	2.02	2.03
09/18/2009	500	SR	16300	standard	2ppm	Nitrate	1	1.94	1.97	1.94	1.97
09/18/2009	500	SR	16300	standard	2ppm	Sulfate	1	1.98	1.93	1.98	1.93
09/18/2009	500	SR	16300	standard	2ppm	Oxalate	1	2.08	2.07	2.08	2.07
09/18/2009	500	SR	16300	standard	2ppm	Phosphate	1	2.04	1.89	2.04	1.89
09/18/2009	500	SR	16300	standard	16ppm	Fluoride	1	16.15	16.19	16.15	16.19
09/18/2009	500	SR	16300	standard	16ppm	Formate	1	16.16	16.23	16.16	16.23

Table A1. Measurements of Standards and SRAT Receipt (SR), SRAT Product (SP), and SME Samples

Date	Nominal DF	Tank	Sample Number	Type of Sample	Bottle ID	Anion	DF	M-13 ICS3000 raw (ppm)	M-14 ICS3000 raw (ppm)	M-13 ICS3000 FINAL (ppm)	M-14 ICS3000 FINAL (ppm)
09/18/2009	500	SR	16300	standard	16ppm	Chloride	1	16.16	16.14	16.16	16.14
09/18/2009	500	SR	16300	standard	16ppm	Nitrite	1	16.53	16.52	16.53	16.52
09/18/2009	500	SR	16300	standard	16ppm	Nitrate	1	16.34	16.16	16.34	16.16
09/18/2009	500	SR	16300	standard	16ppm	Sulfate	1	16.23	16.09	16.23	16.09
09/18/2009	500	SR	16300	standard	16ppm	Oxalate	1	16.07	16.24	16.07	16.24
09/18/2009	500	SR	16300	standard	16ppm	Phosphate	1	15.66	15.559	15.66	15.56
09/25/2009	.	SP	16437	standard	2ppm	Fluoride	1	2	2.04	2	2.04
09/25/2009	.	SP	16437	standard	2ppm	Formate	1	2.01	2.05	2.01	2.05
09/25/2009	.	SP	16437	standard	2ppm	Chloride	1	1.96	1.94	1.96	1.94
09/25/2009	.	SP	16437	standard	2ppm	Nitrite	1	1.98	2.03	1.98	2.03
09/25/2009	.	SP	16437	standard	2ppm	Nitrate	1	1.96	1.88	1.96	1.88
09/25/2009	.	SP	16437	standard	2ppm	Sulfate	1	2.01	1.94	2.01	1.94
09/25/2009	.	SP	16437	standard	2ppm	Oxalate	1	2.15	2.1	2.15	2.1
09/25/2009	.	SP	16437	standard	2ppm	Phosphate	1	2.08	2.01	2.08	2.01
09/25/2009	.	SP	16437	standard	16ppm	Fluoride	1	15.88	16.19	15.88	16.19
09/25/2009	.	SP	16437	standard	16ppm	Formate	1	15.93	16.28	15.93	16.28
09/25/2009	.	SP	16437	standard	16ppm	Chloride	1	15.94	16.17	15.94	16.17
09/25/2009	.	SP	16437	standard	16ppm	Nitrite	1	15.56	15.9	15.56	15.9
09/25/2009	.	SP	16437	standard	16ppm	Nitrate	1	16.12	16.29	16.12	16.29
09/25/2009	.	SP	16437	standard	16ppm	Sulfate	1	16.03	16.01	16.03	16.01
09/25/2009	.	SP	16437	standard	16ppm	Oxalate	1	16.01	16.29	16.01	16.29
09/25/2009	.	SP	16437	standard	16ppm	Phosphate	1	15.92	15.67	15.92	15.67
09/25/2009	5000	SP	16437	process	6159	Fluoride	4741.59556	.	.	.	.
09/25/2009	5000	SP	16437	process	6159	Formate	4741.59556	8.31	8.7	39405	41258
09/25/2009	5000	SP	16437	process	6159	Chloride	4741.59556	.	.	.	.
09/25/2009	5000	SP	16437	process	6159	Nitrite	4741.59556	.	.	.	.
09/25/2009	5000	SP	16437	process	6159	Nitrate	4741.59556	4.66	4.68	22088	22174
09/25/2009	5000	SP	16437	process	6159	Sulfate	4741.59556	.	.	.	.
09/25/2009	5000	SP	16437	process	6159	Oxalate	4741.59556	.	.	.	.
09/25/2009	5000	SP	16437	process	6159	Phosphate	4741.59556	.	.	.	.
09/25/2009	5000	SP	16437	process	6160	Fluoride	4806.68425	.	.	.	.
09/25/2009	5000	SP	16437	process	6160	Formate	4806.68425	8.18	8.41	39321	40422
09/25/2009	5000	SP	16437	process	6160	Chloride	4806.68425	.	.	.	.
09/25/2009	5000	SP	16437	process	6160	Nitrite	4806.68425	.	.	.	.
09/25/2009	5000	SP	16437	process	6160	Nitrate	4806.68425	4.63	4.57	22255	21958
09/25/2009	5000	SP	16437	process	6160	Sulfate	4806.68425	.	.	.	.
09/25/2009	5000	SP	16437	process	6160	Oxalate	4806.68425	.	.	.	.
09/25/2009	5000	SP	16437	process	6160	Phosphate	4806.68425	.	.	.	.
09/25/2009	5000	SP	16437	process	6161	Fluoride	4870.76921	.	.	.	.
09/25/2009	5000	SP	16437	process	6161	Formate	4870.76921	8.09	8.46	39428	41216
09/25/2009	5000	SP	16437	process	6161	Chloride	4870.76921	.	.	.	.
09/25/2009	5000	SP	16437	process	6161	Nitrite	4870.76921	.	.	.	.
09/25/2009	5000	SP	16437	process	6161	Nitrate	4870.76921	4.55	4.49	22175	21871
09/25/2009	5000	SP	16437	process	6161	Sulfate	4870.76921	.	.	.	.
09/25/2009	5000	SP	16437	process	6161	Oxalate	4870.76921	.	.	.	.
09/25/2009	5000	SP	16437	process	6161	Phosphate	4870.76921	.	.	.	.
09/25/2009	5000	SP	16437	process	6162	Fluoride	4920.59689	.	.	.	.
09/25/2009	5000	SP	16437	process	6162	Formate	4920.59689	8.05	8.37	39609	41171
09/25/2009	5000	SP	16437	process	6162	Chloride	4920.59689	.	.	.	.
09/25/2009	5000	SP	16437	process	6162	Nitrite	4920.59689	.	.	.	.
09/25/2009	5000	SP	16437	process	6162	Nitrate	4920.59689	4.52	4.47	22247	21978

Table A1. Measurements of Standards and SRAT Receipt (SR), SRAT Product (SP), and SME Samples

Date	Nominal DF	Tank	Sample Number	Type of Sample	Bottle ID	Anion	DF	M-13 ICS3000 raw (ppm)	M-14 ICS3000 raw (ppm)	M-13 ICS3000 FINAL (ppm)	M-14 ICS3000 FINAL (ppm)
09/25/2009	5000	SP	16437	process	6162	Sulfate	4920.59689	.	.	.	.
09/25/2009	5000	SP	16437	process	6162	Oxalate	4920.59689	.	.	.	.
09/25/2009	5000	SP	16437	process	6162	Phosphate	4920.59689	.	.	.	.
09/25/2009	16	SP	16437	standard	9999	Fluoride	2	8.05	8.1	100.63	101.25
09/25/2009	16	SP	16437	standard	9999	Formate	2	12.02	12.39	99.93	102.63
09/25/2009	16	SP	16437	standard	9999	Chloride	2	8.01	8	100.08	100.03
09/25/2009	16	SP	16437	standard	9999	Nitrite	2	7.83	7.93	97.86	99.11
09/25/2009	16	SP	16437	standard	9999	Nitrate	2	10.48	10.59	102.77	104.48
09/25/2009	16	SP	16437	standard	9999	Sulfate	2	8.16	8.03	101.96	100.35
09/25/2009	16	SP	16437	standard	9999	Oxalate	2	8.29	8.33	103.67	104.15
09/25/2009	16	SP	16437	standard	9999	Phosphate	2	8.1	7.76	101.21	97.01
09/25/2009	500	SP	16437	process	6149	Fluoride	488.881496	.	.	.	.
09/25/2009	500	SP	16437	process	6149	Formate	488.881496	.	.	.	.
09/25/2009	500	SP	16437	process	6149	Chloride	488.881496	.	.	.	.
09/25/2009	500	SP	16437	process	6149	Nitrite	488.881496	.	.	.	.
09/25/2009	500	SP	16437	process	6149	Nitrate	488.881496	.	.	.	.
09/25/2009	500	SP	16437	process	6149	Sulfate	488.881496	1.33	1.31	652	640
09/25/2009	500	SP	16437	process	6149	Oxalate	488.881496	.	.	.	.
09/25/2009	500	SP	16437	process	6149	Phosphate	488.881496	.	.	.	.
09/25/2009	500	SP	16437	process	6150	Fluoride	510.796075	.	.	.	.
09/25/2009	500	SP	16437	process	6150	Formate	510.796075	.	.	.	.
09/25/2009	500	SP	16437	process	6150	Chloride	510.796075	.	.	.	.
09/25/2009	500	SP	16437	process	6150	Nitrite	510.796075	.	.	.	.
09/25/2009	500	SP	16437	process	6150	Nitrate	510.796075	.	.	.	.
09/25/2009	500	SP	16437	process	6150	Sulfate	510.796075	1.35	1.31	688	667
09/25/2009	500	SP	16437	process	6150	Oxalate	510.796075	.	.	.	.
09/25/2009	500	SP	16437	process	6150	Phosphate	510.796075	.	.	.	.
09/25/2009	500	SP	16437	process	6151	Fluoride	526.752581	.	.	.	.
09/25/2009	500	SP	16437	process	6151	Formate	526.752581	.	.	.	.
09/25/2009	500	SP	16437	process	6151	Chloride	526.752581	.	.	.	.
09/25/2009	500	SP	16437	process	6151	Nitrite	526.752581	.	.	.	.
09/25/2009	500	SP	16437	process	6151	Nitrate	526.752581	.	.	.	.
09/25/2009	500	SP	16437	process	6151	Sulfate	526.752581	1.31	1.27	690	667
09/25/2009	500	SP	16437	process	6151	Oxalate	526.752581	.	.	.	.
09/25/2009	500	SP	16437	process	6151	Phosphate	526.752581	.	.	.	.
09/25/2009	500	SP	16437	process	6152	Fluoride	523.558005	.	.	.	.
09/25/2009	500	SP	16437	process	6152	Formate	523.558005	.	.	.	.
09/25/2009	500	SP	16437	process	6152	Chloride	523.558005	.	.	.	.
09/25/2009	500	SP	16437	process	6152	Nitrite	523.558005	.	.	.	.
09/25/2009	500	SP	16437	process	6152	Nitrate	523.558005	.	.	.	.
09/25/2009	500	SP	16437	process	6152	Sulfate	523.558005	1.33	1.29	698	676
09/25/2009	500	SP	16437	process	6152	Oxalate	523.558005	.	.	.	.
09/25/2009	500	SP	16437	process	6152	Phosphate	523.558005	.	.	.	.
09/25/2009	500	SR	16437	standard	2ppm	Fluoride	1	2.01	2.04	2.01	2.04
09/25/2009	500	SR	16437	standard	2ppm	Formate	1	2.02	2.07	2.02	2.07
09/25/2009	500	SR	16437	standard	2ppm	Chloride	1	1.97	1.93	1.97	1.93
09/25/2009	500	SR	16437	standard	2ppm	Nitrite	1	1.98	2.04	1.98	2.04
09/25/2009	500	SR	16437	standard	2ppm	Nitrate	1	1.96	1.9	1.96	1.9
09/25/2009	500	SR	16437	standard	2ppm	Sulfate	1	2.01	1.96	2.01	1.96
09/25/2009	500	SR	16437	standard	2ppm	Oxalate	1	2.16	2.12	2.16	2.12
09/25/2009	500	SR	16437	standard	2ppm	Phosphate	1	2.07	1.99	2.07	1.99

Table A1. Measurements of Standards and SRAT Receipt (SR), SRAT Product (SP), and SME Samples

Date	Nominal DF	Tank	Sample Number	Type of Sample	Bottle ID	Anion	DF	M-13 ICS3000 raw (ppm)	M-14 ICS3000 raw (ppm)	M-13 ICS3000 FINAL (ppm)	M-14 ICS3000 FINAL (ppm)
09/25/2009	500	SR	16437	standard	16ppm	Fluoride	1	15.94	16.17	15.94	16.17
09/25/2009	500	SR	16437	standard	16ppm	Formate	1	16.08	16.41	16.08	16.41
09/25/2009	500	SR	16437	standard	16ppm	Chloride	1	15.99	16.14	15.99	16.14
09/25/2009	500	SR	16437	standard	16ppm	Nitrite	1	15.79	16.03	15.79	16.03
09/25/2009	500	SR	16437	standard	16ppm	Nitrate	1	16.21	16.34	16.21	16.34
09/25/2009	500	SR	16437	standard	16ppm	Sulfate	1	16.05	16	16.05	16
09/25/2009	500	SR	16437	standard	16ppm	Oxalate	1	16.16	16.37	16.16	16.37
09/25/2009	500	SR	16437	standard	16ppm	Phosphate	1	15.95	15.6098	15.95	15.61
09/17/2009	.	SME	16282	standard	2ppm	Fluoride	1	2.03	2.03	2.03	2.03
09/17/2009	.	SME	16282	standard	2ppm	Formate	1	2.04	2.04	2.04	2.04
09/17/2009	.	SME	16282	standard	2ppm	Chloride	1	1.98	1.9	1.98	1.9
09/17/2009	.	SME	16282	standard	2ppm	Nitrite	1	2.03	1.96	2.03	1.96
09/17/2009	.	SME	16282	standard	2ppm	Nitrate	1	1.93	1.86	1.93	1.86
09/17/2009	.	SME	16282	standard	2ppm	Sulfate	1	1.97	1.96	1.97	1.96
09/17/2009	.	SME	16282	standard	2ppm	Oxalate	1	2.09	2.12	2.09	2.12
09/17/2009	.	SME	16282	standard	2ppm	Phosphate	1	1.92	1.92	1.92	1.92
09/17/2009	.	SME	16282	standard	16ppm	Fluoride	1	16.09	16.1	16.09	16.1
09/17/2009	.	SME	16282	standard	16ppm	Formate	1	16.29	16.13	16.29	16.13
09/17/2009	.	SME	16282	standard	16ppm	Chloride	1	16.15	16.12	16.15	16.12
09/17/2009	.	SME	16282	standard	16ppm	Nitrite	1	16.41	16.34	16.41	16.34
09/17/2009	.	SME	16282	standard	16ppm	Nitrate	1	16.3	16.31	16.3	16.31
09/17/2009	.	SME	16282	standard	16ppm	Sulfate	1	16.13	16.04	16.13	16.04
09/17/2009	.	SME	16282	standard	16ppm	Oxalate	1	16.16	16.36	16.16	16.36
09/17/2009	.	SME	16282	standard	16ppm	Phosphate	1	15.67	15.67	15.67	15.67
09/17/2009	5000	SME	16282	process	5440	Fluoride	4904.50385	.	.	.	.
09/17/2009	5000	SME	16282	process	5440	Formate	4904.50385	6.63	6.79	32519	33323
09/17/2009	5000	SME	16282	process	5440	Chloride	4904.50385	.	.	.	.
09/17/2009	5000	SME	16282	process	5440	Nitrite	4904.50385	.	.	.	.
09/17/2009	5000	SME	16282	process	5440	Nitrate	4904.50385	3.62	3.44	17765	16860
09/17/2009	5000	SME	16282	process	5440	Sulfate	4904.50385	.	.	.	.
09/17/2009	5000	SME	16282	process	5440	Oxalate	4904.50385	.	.	.	.
09/17/2009	5000	SME	16282	process	5440	Phosphate	4904.50385	.	.	.	.
09/17/2009	5000	SME	16282	process	5457	Fluoride	4991.76124	.	.	.	.
09/17/2009	5000	SME	16282	process	5457	Formate	4991.76124	6.37	6.47	31784	32298
09/17/2009	5000	SME	16282	process	5457	Chloride	4991.76124	.	.	.	.
09/17/2009	5000	SME	16282	process	5457	Nitrite	4991.76124	.	.	.	.
09/17/2009	5000	SME	16282	process	5457	Nitrate	4991.76124	3.42	3.29	17088	16440
09/17/2009	5000	SME	16282	process	5457	Sulfate	4991.76124	.	.	.	.
09/17/2009	5000	SME	16282	process	5457	Oxalate	4991.76124	.	.	.	.
09/17/2009	5000	SME	16282	process	5457	Phosphate	4991.76124	.	.	.	.
09/17/2009	5000	SME	16282	process	5458	Fluoride	5112.31772	.	.	.	.
09/17/2009	5000	SME	16282	process	5458	Formate	5112.31772	6.38	6.52	32620	33326
09/17/2009	5000	SME	16282	process	5458	Chloride	5112.31772	.	.	.	.
09/17/2009	5000	SME	16282	process	5458	Nitrite	5112.31772	.	.	.	.
09/17/2009	5000	SME	16282	process	5458	Nitrate	5112.31772	3.46	3.3	17702	16863
09/17/2009	5000	SME	16282	process	5458	Sulfate	5112.31772	.	.	.	.
09/17/2009	5000	SME	16282	process	5458	Oxalate	5112.31772	.	.	.	.
09/17/2009	5000	SME	16282	process	5458	Phosphate	5112.31772	.	.	.	.
09/17/2009	5000	SME	16282	process	5459	Fluoride	5146.52111	.	.	.	.
09/17/2009	5000	SME	16282	process	5459	Formate	5146.52111	6.36	6.53	32738	33586
09/17/2009	5000	SME	16282	process	5459	Chloride	5146.52111	.	.	.	.

Table A1. Measurements of Standards and SRAT Receipt (SR), SRAT Product (SP), and SME Samples

Date	Nominal DF	Tank	Sample Number	Type of Sample	Bottle ID	Anion	DF	M-13 ICS3000 raw (ppm)	M-14 ICS3000 raw (ppm)	M-13 ICS3000 FINAL (ppm)	M-14 ICS3000 FINAL (ppm)
09/17/2009	5000	SME	16282	process	5459	Nitrite	5146.52111	.	.	.	.
09/17/2009	5000	SME	16282	process	5459	Nitrate	5146.52111	3.48	3.32	17926	17104
09/17/2009	5000	SME	16282	process	5459	Sulfate	5146.52111	.	.	.	.
09/17/2009	5000	SME	16282	process	5459	Oxalate	5146.52111	.	.	.	.
09/17/2009	5000	SME	16282	process	5459	Phosphate	5146.52111	.	.	.	.
09/17/2009	16	SME	16282	standard	9999	Fluoride	2	8.1	8.11	101.27	101.32
09/17/2009	16	SME	16282	standard	9999	Formate	2	11.46	11.49	103.46	102.85
09/17/2009	16	SME	16282	standard	9999	Chloride	2	8.1	8.03	101.27	100.33
09/17/2009	16	SME	16282	standard	9999	Nitrite	2	8.27	8.17	103.32	102.17
09/17/2009	16	SME	16282	standard	9999	Nitrate	2	10.05	9.96	103.85	103.78
09/17/2009	16	SME	16282	standard	9999	Sulfate	2	8.18	8.09	102.23	101.19
09/17/2009	16	SME	16282	standard	9999	Oxalate	2	8.24	8.31	102.98	103.85
09/17/2009	16	SME	16282	standard	9999	Phosphate	2	7.96	7.8	99.54	97.56
09/17/2009	500	SME	16282	process	5449	Fluoride	482.787038	.	.	.	.
09/17/2009	500	SME	16282	process	5449	Formate	482.787038	.	.	.	.
09/17/2009	500	SME	16282	process	5449	Chloride	482.787038	.	.	.	.
09/17/2009	500	SME	16282	process	5449	Nitrite	482.787038	.	.	.	.
09/17/2009	500	SME	16282	process	5449	Nitrate	482.787038	.	.	.	.
09/17/2009	500	SME	16282	process	5449	Sulfate	482.787038	1.1	1.11	533	536
09/17/2009	500	SME	16282	process	5449	Oxalate	482.787038	.	.	.	.
09/17/2009	500	SME	16282	process	5449	Phosphate	482.787038	.	.	.	.
09/17/2009	500	SME	16282	process	5450	Fluoride	488.261372	.	.	.	.
09/17/2009	500	SME	16282	process	5450	Formate	488.261372	.	.	.	.
09/17/2009	500	SME	16282	process	5450	Chloride	488.261372	.	.	.	.
09/17/2009	500	SME	16282	process	5450	Nitrite	488.261372	.	.	.	.
09/17/2009	500	SME	16282	process	5450	Nitrate	488.261372	.	.	.	.
09/17/2009	500	SME	16282	process	5450	Sulfate	488.261372	1.08	1.07	528	520
09/17/2009	500	SME	16282	process	5450	Oxalate	488.261372	.	.	.	.
09/17/2009	500	SME	16282	process	5450	Phosphate	488.261372	.	.	.	.
09/17/2009	500	SME	16282	process	5451	Fluoride	502.002835	.	.	.	.
09/17/2009	500	SME	16282	process	5451	Formate	502.002835	.	.	.	.
09/17/2009	500	SME	16282	process	5451	Chloride	502.002835	.	.	.	.
09/17/2009	500	SME	16282	process	5451	Nitrite	502.002835	.	.	.	.
09/17/2009	500	SME	16282	process	5451	Nitrate	502.002835	.	.	.	.
09/17/2009	500	SME	16282	process	5451	Sulfate	502.002835	1.09	1.06	545	534
09/17/2009	500	SME	16282	process	5451	Oxalate	502.002835	.	.	.	.
09/17/2009	500	SME	16282	process	5451	Phosphate	502.002835	.	.	.	.
09/17/2009	500	SME	16282	process	5452	Fluoride	505.857317	.	.	.	.
09/17/2009	500	SME	16282	process	5452	Formate	505.857317	.	.	.	.
09/17/2009	500	SME	16282	process	5452	Chloride	505.857317	.	.	.	.
09/17/2009	500	SME	16282	process	5452	Nitrite	505.857317	.	.	.	.
09/17/2009	500	SME	16282	process	5452	Nitrate	505.857317	.	.	.	.
09/17/2009	500	SME	16282	process	5452	Sulfate	505.857317	1.09	1.12	553	547
09/17/2009	500	SME	16282	process	5452	Oxalate	505.857317	.	.	.	.
09/17/2009	500	SME	16282	process	5452	Phosphate	505.857317	.	.	.	.
09/17/2009	500	SR	16282	standard	2ppm	Fluoride	1	2.03	2.04	2.03	2.04
09/17/2009	500	SR	16282	standard	2ppm	Formate	1	2.04	1.97	2.04	1.97
09/17/2009	500	SR	16282	standard	2ppm	Chloride	1	1.98	1.89	1.98	1.89
09/17/2009	500	SR	16282	standard	2ppm	Nitrite	1	2.04	1.95	2.04	1.95
09/17/2009	500	SR	16282	standard	2ppm	Nitrate	1	1.95	1.9	1.95	1.9
09/17/2009	500	SR	16282	standard	2ppm	Sulfate	1	1.99	1.95	1.99	1.95

Table A1. Measurements of Standards and SRAT Receipt (SR), SRAT Product (SP), and SME Samples

Date	Nominal DF	Tank	Sample Number	Type of Sample	Bottle ID	Anion	DF	M-13 ICS3000 raw (ppm)	M-14 ICS3000 raw (ppm)	M-13 ICS3000 FINAL (ppm)	M-14 ICS3000 FINAL (ppm)
09/17/2009	500	SR	16282	standard	2ppm	Oxalate	1	2.12	2.12	2.12	2.12
09/17/2009	500	SR	16282	standard	2ppm	Phosphate	1	2.07	1.9	2.07	1.9
09/17/2009	500	SR	16282	standard	16ppm	Fluoride	1	16.09	16.09	16.09	16.09
09/17/2009	500	SR	16282	standard	16ppm	Formate	1	16.3	16.34	16.3	16.34
09/17/2009	500	SR	16282	standard	16ppm	Chloride	1	16.14	16.09	16.14	16.09
09/17/2009	500	SR	16282	standard	16ppm	Nitrite	1	16.46	16.31	16.46	16.31
09/17/2009	500	SR	16282	standard	16ppm	Nitrate	1	16.33	16.27	16.33	16.27
09/17/2009	500	SR	16282	standard	16ppm	Sulfate	1	16.17	16.02	16.17	16.02
09/17/2009	500	SR	16282	standard	16ppm	Oxalate	1	16.22	16.32	16.22	16.32
09/17/2009	500	SR	16282	standard	16ppm	Phosphate	1	15.8	15.62	15.8	15.62
09/26/2009	.	SME	16384	standard	2ppm	Fluoride	1	2.04	2.05	2.04	2.05
09/26/2009	.	SME	16384	standard	2ppm	Formate	1	1.98	1.99	1.98	1.99
09/26/2009	.	SME	16384	standard	2ppm	Chloride	1	2.01	1.94	2.01	1.94
09/26/2009	.	SME	16384	standard	2ppm	Nitrite	1	2.05	2.06	2.05	2.06
09/26/2009	.	SME	16384	standard	2ppm	Nitrate	1	2.03	1.93	2.03	1.93
09/26/2009	.	SME	16384	standard	2ppm	Sulfate	1	2.05	1.96	2.05	1.96
09/26/2009	.	SME	16384	standard	2ppm	Oxalate	1	2.15	2.09	2.15	2.09
09/26/2009	.	SME	16384	standard	2ppm	Phosphate	1	2.05	1.98	2.05	1.98
09/26/2009	.	SME	16384	standard	16ppm	Fluoride	1	16.31	16.34	16.31	16.34
09/26/2009	.	SME	16384	standard	16ppm	Formate	1	16.17	16.26	16.17	16.26
09/26/2009	.	SME	16384	standard	16ppm	Chloride	1	16.3	16.26	16.3	16.26
09/26/2009	.	SME	16384	standard	16ppm	Nitrite	1	16.18	16.18	16.18	16.08
09/26/2009	.	SME	16384	standard	16ppm	Nitrate	1	16.57	16.57	16.57	16.57
09/26/2009	.	SME	16384	standard	16ppm	Sulfate	1	16.47	16.22	16.47	16.22
09/26/2009	.	SME	16384	standard	16ppm	Oxalate	1	16.3	16.34	16.3	16.34
09/26/2009	.	SME	16384	standard	16ppm	Phosphate	1	16.11	15.66	16.11	15.66
09/26/2009	5000	SME	16384	process	5964	Fluoride	5082.47633	.	.	.	.
09/26/2009	5000	SME	16384	process	5964	Formate	5082.47633	6.97	7.07	35426	35954
09/26/2009	5000	SME	16384	process	5964	Chloride	5082.47633	.	.	.	.
09/26/2009	5000	SME	16384	process	5964	Nitrite	5082.47633	.	.	.	.
09/26/2009	5000	SME	16384	process	5964	Nitrate	5082.47633	3.81	3.68	19358	18700
09/26/2009	5000	SME	16384	process	5964	Sulfate	5082.47633	.	.	.	.
09/26/2009	5000	SME	16384	process	5964	Oxalate	5082.47633	.	.	.	.
09/26/2009	5000	SME	16384	process	5964	Phosphate	5082.47633	.	.	.	.
09/26/2009	5000	SME	16384	process	5965	Fluoride	5118.0615	.	.	.	.
09/26/2009	5000	SME	16384	process	5965	Formate	5118.0615	6.97	7.25	35682	37121
09/26/2009	5000	SME	16384	process	5965	Chloride	5118.0615	.	.	.	.
09/26/2009	5000	SME	16384	process	5965	Nitrite	5118.0615	.	.	.	.
09/26/2009	5000	SME	16384	process	5965	Nitrate	5118.0615	3.73	3.45	19088	17655
09/26/2009	5000	SME	16384	process	5965	Sulfate	5118.0615	.	.	.	.
09/26/2009	5000	SME	16384	process	5965	Oxalate	5118.0615	.	.	.	.
09/26/2009	5000	SME	16384	process	5965	Phosphate	5118.0615	.	.	.	.
09/26/2009	5000	SME	16384	process	5966	Fluoride	5028.78687	.	.	.	.
09/26/2009	5000	SME	16384	process	5966	Formate	5028.78687	7.1	7.24	35715	36387
09/26/2009	5000	SME	16384	process	5966	Chloride	5028.78687	.	.	.	.
09/26/2009	5000	SME	16384	process	5966	Nitrite	5028.78687	.	.	.	.
09/26/2009	5000	SME	16384	process	5966	Nitrate	5028.78687	3.8	3.7	19123	18603
09/26/2009	5000	SME	16384	process	5966	Sulfate	5028.78687	.	.	.	.
09/26/2009	5000	SME	16384	process	5966	Oxalate	5028.78687	.	.	.	.
09/26/2009	5000	SME	16384	process	5966	Phosphate	5028.78687	.	.	.	.
09/26/2009	5000	SME	16384	process	5967	Fluoride	4915.39841	.	.	.	.

Table A1. Measurements of Standards and SRAT Receipt (SR), SRAT Product (SP), and SME Samples

Date	Nominal DF	Tank	Sample Number	Type of Sample	Bottle ID	Anion	DF	M-13 ICS3000 raw (ppm)	M-14 ICS3000 raw (ppm)	M-13 ICS3000 FINAL (ppm)	M-14 ICS3000 FINAL (ppm)
09/26/2009	5000	SME	16384	process	5967	Formate	4915.39841	6.89	7.02	33886	34517
09/26/2009	5000	SME	16384	process	5967	Chloride	4915.39841	.	.	.	.
09/26/2009	5000	SME	16384	process	5967	Nitrite	4915.39841	.	.	.	.
09/26/2009	5000	SME	16384	process	5967	Nitrate	4915.39841	3.69	3.62	18136	17816
09/26/2009	5000	SME	16384	process	5967	Sulfate	4915.39841	.	.	.	.
09/26/2009	5000	SME	16384	process	5967	Oxalate	4915.39841	.	.	.	.
09/26/2009	5000	SME	16384	process	5967	Phosphate	4915.39841	.	.	.	.
09/26/2009	16	SME	16384	standard	9999	Fluoride	2	8.23	8.24	102.85	102.99
09/26/2009	16	SME	16384	standard	9999	Formate	2	11.58	11.8	101.71	103.67
09/26/2009	16	SME	16384	standard	9999	Chloride	2	8.2	8.14	102.46	101.71
09/26/2009	16	SME	16384	standard	9999	Nitrite	2	8.13	8.11	101.62	101.34
09/26/2009	16	SME	16384	standard	9999	Nitrate	2	10.43	10.27	107.28	105.77
09/26/2009	16	SME	16384	standard	9999	Sulfate	2	8.37	8.19	104.62	102.39
09/26/2009	16	SME	16384	standard	9999	Oxalate	2	8.37	8.37	104.67	104.65
09/26/2009	16	SME	16384	standard	9999	Phosphate	2	8.17	7.86	102.16	98.29
09/26/2009	500	SME	16384	process	5972	Fluoride	499.172453	.	.	.	.
09/26/2009	500	SME	16384	process	5972	Formate	499.172453	.	.	.	.
09/26/2009	500	SME	16384	process	5972	Chloride	499.172453	.	.	.	.
09/26/2009	500	SME	16384	process	5972	Nitrite	499.172453	.	.	.	.
09/26/2009	500	SME	16384	process	5972	Nitrate	499.172453	.	.	.	.
09/26/2009	500	SME	16384	process	5972	Sulfate	499.172453	1.24	1.19	617	592
09/26/2009	500	SME	16384	process	5972	Oxalate	499.172453	.	.	.	.
09/26/2009	500	SME	16384	process	5972	Phosphate	499.172453	.	.	.	.
09/26/2009	500	SME	16384	process	5973	Fluoride	508.475917	.	.	.	.
09/26/2009	500	SME	16384	process	5973	Formate	508.475917	.	.	.	.
09/26/2009	500	SME	16384	process	5973	Chloride	508.475917	.	.	.	.
09/26/2009	500	SME	16384	process	5973	Nitrite	508.475917	.	.	.	.
09/26/2009	500	SME	16384	process	5973	Nitrate	508.475917	.	.	.	.
09/26/2009	500	SME	16384	process	5973	Sulfate	508.475917	1.2	1.15	608	586
09/26/2009	500	SME	16384	process	5973	Oxalate	508.475917	.	.	.	.
09/26/2009	500	SME	16384	process	5973	Phosphate	508.475917	.	.	.	.
09/26/2009	500	SME	16384	process	5974	Fluoride	492.102594	.	.	.	.
09/26/2009	500	SME	16384	process	5974	Formate	492.102594	.	.	.	.
09/26/2009	500	SME	16384	process	5974	Chloride	492.102594	.	.	.	.
09/26/2009	500	SME	16384	process	5974	Nitrite	492.102594	.	.	.	.
09/26/2009	500	SME	16384	process	5974	Nitrate	492.102594	.	.	.	.
09/26/2009	500	SME	16384	process	5974	Sulfate	492.102594	1.22	1.17	602	575
09/26/2009	500	SME	16384	process	5974	Oxalate	492.102594	.	.	.	.
09/26/2009	500	SME	16384	process	5974	Phosphate	492.102594	.	.	.	.
09/26/2009	500	SME	16384	process	5975	Fluoride	488.53405	.	.	.	.
09/26/2009	500	SME	16384	process	5975	Formate	488.53405	.	.	.	.
09/26/2009	500	SME	16384	process	5975	Chloride	488.53405	.	.	.	.
09/26/2009	500	SME	16384	process	5975	Nitrite	488.53405	.	.	.	.
09/26/2009	500	SME	16384	process	5975	Nitrate	488.53405	.	.	.	.
09/26/2009	500	SME	16384	process	5975	Sulfate	488.53405	1.24	1.18	607	576
09/26/2009	500	SME	16384	process	5975	Oxalate	488.53405	.	.	.	.
09/26/2009	500	SME	16384	process	5975	Phosphate	488.53405	.	.	.	.
09/26/2009	500	SR	16384	standard	2ppm	Fluoride	1	2.04	2.04	2.04	2.04
09/26/2009	500	SR	16384	standard	2ppm	Formate	1	1.97	2.02	1.97	2.02
09/26/2009	500	SR	16384	standard	2ppm	Chloride	1	2	1.93	2	1.93
09/26/2009	500	SR	16384	standard	2ppm	Nitrite	1	2.04	2.05	2.04	2.05

Table A1. Measurements of Standards and SRAT Receipt (SR), SRAT Product (SP), and SME Samples

Date	Nominal DF	Tank	Sample Number	Type of Sample	Bottle ID	Anion	DF	M-13 ICS3000 raw (ppm)	M-14 ICS3000 raw (ppm)	M-13 ICS3000 FINAL (ppm)	M-14 ICS3000 FINAL (ppm)
09/26/2009	500	SR	16384	standard	2ppm	Nitrate	1	2.02	1.97	2.02	1.97
09/26/2009	500	SR	16384	standard	2ppm	Sulfate	1	2.03	1.96	2.03	1.96
09/26/2009	500	SR	16384	standard	2ppm	Oxalate	1	2.13	2.09	2.13	2.09
09/26/2009	500	SR	16384	standard	2ppm	Phosphate	1	1.97	1.96	1.97	1.96
09/26/2009	500	SR	16384	standard	16ppm	Fluoride	1	16.32	16.36	16.32	16.36
09/26/2009	500	SR	16384	standard	16ppm	Formate	1	16.26	16.09	16.26	16.09
09/26/2009	500	SR	16384	standard	16ppm	Chloride	1	16.29	16.32	16.29	16.32
09/26/2009	500	SR	16384	standard	16ppm	Nitrite	1	16.17	16.23	16.17	16.23
09/26/2009	500	SR	16384	standard	16ppm	Nitrate	1	16.53	16.59	16.53	16.59
09/26/2009	500	SR	16384	standard	16ppm	Sulfate	1	16.41	16.28	16.41	16.28
09/26/2009	500	SR	16384	standard	16ppm	Oxalate	1	16.33	16.5	16.33	16.5
09/26/2009	500	SR	16384	standard	16ppm	Phosphate	1	15.96	15.74	15.96	15.74

Table A2. Measurements of Simulants of SRAT Receipt, SRAT Product, and SME, of Standards Used for Calibration, and of Standards from Developed from Dried Salts

Type	Simulant	Known Concentration (ppm)	Anion	Date	M-14 ICS 3000 Measurement (ppm)	M-13 ICS 3000 Measurement (ppm)
Simulated Sample Crosscheck Data 500X Dilution	SME	1	Fluoride	9/15	1.03	1.02
Simulated Sample Crosscheck Data 500X Dilution	SME	60	Formate	9/15	56.31	55.48
Simulated Sample Crosscheck Data 500X Dilution	SME	1	Chloride	9/15	0.97	1.01
Simulated Sample Crosscheck Data 500X Dilution	SME	1	Nitrite	9/15	0.99	1.02
Simulated Sample Crosscheck Data 500X Dilution	SME	25	Nitrate	9/15	24.89	25.14
Simulated Sample Crosscheck Data 500X Dilution	SME	2.5	Sulfate	9/15	2.49	2.55
Simulated Sample Crosscheck Data 500X Dilution	SME	2.5	Oxalate	9/15	2.67	2.71
Simulated Sample Crosscheck Data 500X Dilution	SME	2.5	Phosphate	9/15	2.47	2.71
Simulated Sample Crosscheck Data 500X Dilution	SME	1	Fluoride	9/15	1.02	1.03
Simulated Sample Crosscheck Data 500X Dilution	SME	60	Formate	9/15	56.27	55.5
Simulated Sample Crosscheck Data 500X Dilution	SME	1	Chloride	9/15	0.97	1.01
Simulated Sample Crosscheck Data 500X Dilution	SME	1	Nitrite	9/15	0.99	1.02
Simulated Sample Crosscheck Data 500X Dilution	SME	25	Nitrate	9/15	24.86	25.15
Simulated Sample Crosscheck Data 500X Dilution	SME	2.5	Sulfate	9/15	2.49	2.71
Simulated Sample Crosscheck Data 500X Dilution	SME	2.5	Oxalate	9/15	2.67	2.63
Simulated Sample Crosscheck Data 500X Dilution	SME	2.5	Phosphate	9/15	2.47	2.71
Simulated Sample Crosscheck Data 500X Dilution	SME	1	Fluoride	9/15	1.02	1.03
Simulated Sample Crosscheck Data 500X Dilution	SME	60	Formate	9/15	56.38	55.52
Simulated Sample Crosscheck Data 500X Dilution	SME	1	Chloride	9/15	0.97	1.01
Simulated Sample Crosscheck Data 500X Dilution	SME	1	Nitrite	9/15	0.99	1.02
Simulated Sample Crosscheck Data 500X Dilution	SME	25	Nitrate	9/15	24.92	25.16
Simulated Sample Crosscheck Data 500X Dilution	SME	2.5	Sulfate	9/15	2.49	2.55
Simulated Sample Crosscheck Data 500X Dilution	SME	2.5	Oxalate	9/15	2.67	2.71
Simulated Sample Crosscheck Data 500X Dilution	SME	2.5	Phosphate	9/15	2.48	2.63
Simulated Sample Crosscheck Data 500X Dilution	SME	1	Fluoride	9/16	1.03	1.02
Simulated Sample Crosscheck Data 500X Dilution	SME	60	Formate	9/16	56.36	53.83
Simulated Sample Crosscheck Data 500X Dilution	SME	1	Chloride	9/16	0.96	1.01
Simulated Sample Crosscheck Data 500X Dilution	SME	1	Nitrite	9/16	0.99	1.03
Simulated Sample Crosscheck Data 500X Dilution	SME	25	Nitrate	9/16	24.85	24.98
Simulated Sample Crosscheck Data 500X Dilution	SME	2.5	Sulfate	9/16	2.48	2.5
Simulated Sample Crosscheck Data 500X Dilution	SME	2.5	Oxalate	9/16	2.67	2.66
Simulated Sample Crosscheck Data 500X Dilution	SME	2.5	Phosphate	9/16	2.47	2.54
Simulated Sample Crosscheck Data 500X Dilution	SME	1	Fluoride	9/16	1.03	1.02
Simulated Sample Crosscheck Data 500X Dilution	SME	60	Formate	9/16	56.38	53.86
Simulated Sample Crosscheck Data 500X Dilution	SME	1	Chloride	9/16	0.96	1.01
Simulated Sample Crosscheck Data 500X Dilution	SME	1	Nitrite	9/16	0.98	1.03
Simulated Sample Crosscheck Data 500X Dilution	SME	25	Nitrate	9/16	24.87	25.01
Simulated Sample Crosscheck Data 500X Dilution	SME	2.5	Sulfate	9/16	2.48	2.5
Simulated Sample Crosscheck Data 500X Dilution	SME	2.5	Oxalate	9/16	2.67	2.66
Simulated Sample Crosscheck Data 500X Dilution	SME	2.5	Phosphate	9/16	2.47	2.55
Simulated Sample Crosscheck Data 500X Dilution	SRAT Receipt	1	Fluoride	9/15	1.02	1.02
Simulated Sample Crosscheck Data 500X Dilution	SRAT Receipt	15	Formate	9/15	15.65	15.54
Simulated Sample Crosscheck Data 500X Dilution	SRAT Receipt	1	Chloride	9/15	0.98	1
Simulated Sample Crosscheck Data 500X Dilution	SRAT Receipt	15	Nitrite	9/15	15.63	15.11
Simulated Sample Crosscheck Data 500X Dilution	SRAT Receipt	15	Nitrate	9/15	15.04	15.09
Simulated Sample Crosscheck Data 500X Dilution	SRAT Receipt	2.5	Sulfate	9/15	2.47	2.53
Simulated Sample Crosscheck Data 500X Dilution	SRAT Receipt	2.5	Oxalate	9/15	2.67	2.71
Simulated Sample Crosscheck Data 500X Dilution	SRAT Receipt	2.5	Phosphate	9/15	2.48	2.64
Simulated Sample Crosscheck Data 500X Dilution	SRAT Receipt	1	Fluoride	9/15	1.02	1.02
Simulated Sample Crosscheck Data 500X Dilution	SRAT Receipt	15	Formate	9/15	15.56	15.56

Table A2. Measurements of Simulants of SRAT Receipt, SRAT Product, and SME, of Standards Used for Calibration, and of Standards from Developed from Dried Salts

Type	Simulant	Known Concentration (ppm)	Anion	Date	M-14 ICS 3000 Measurement (ppm)	M-13 ICS 3000 Measurement (ppm)
Simulated Sample Crosscheck Data 500X Dilution	SRAT Receipt	1	Chloride	9/15	1.03	1.03
Simulated Sample Crosscheck Data 500X Dilution	SRAT Receipt	15	Nitrite	9/15	15.65	15.11
Simulated Sample Crosscheck Data 500X Dilution	SRAT Receipt	15	Nitrate	9/15	15.03	15.1
Simulated Sample Crosscheck Data 500X Dilution	SRAT Receipt	2.5	Sulfate	9/15	2.47	2.54
Simulated Sample Crosscheck Data 500X Dilution	SRAT Receipt	2.5	Oxalate	9/15	2.67	2.71
Simulated Sample Crosscheck Data 500X Dilution	SRAT Receipt	2.5	Phosphate	9/15	2.48	2.63
Simulated Sample Crosscheck Data 500X Dilution	SRAT Receipt	1	Fluoride	9/15	1.02	1.02
Simulated Sample Crosscheck Data 500X Dilution	SRAT Receipt	15	Formate	9/15	15.54	15.54
Simulated Sample Crosscheck Data 500X Dilution	SRAT Receipt	1	Chloride	9/15	0.98	1
Simulated Sample Crosscheck Data 500X Dilution	SRAT Receipt	15	Nitrite	9/15	15.65	15.1
Simulated Sample Crosscheck Data 500X Dilution	SRAT Receipt	15	Nitrate	9/15	15.02	15.08
Simulated Sample Crosscheck Data 500X Dilution	SRAT Receipt	2.5	Sulfate	9/15	2.47	2.53
Simulated Sample Crosscheck Data 500X Dilution	SRAT Receipt	2.5	Oxalate	9/15	2.67	2.71
Simulated Sample Crosscheck Data 500X Dilution	SRAT Receipt	2.5	Phosphate	9/15	2.47	2.64
Simulated Sample Crosscheck Data 500X Dilution	SRAT Receipt	1	Fluoride	9/16	1.02	1.01
Simulated Sample Crosscheck Data 500X Dilution	SRAT Receipt	15	Formate	9/16	15.59	14.75
Simulated Sample Crosscheck Data 500X Dilution	SRAT Receipt	1	Chloride	9/16	0.97	0.99
Simulated Sample Crosscheck Data 500X Dilution	SRAT Receipt	15	Nitrite	9/16	15.58	15.15
Simulated Sample Crosscheck Data 500X Dilution	SRAT Receipt	15	Nitrate	9/16	15	15.01
Simulated Sample Crosscheck Data 500X Dilution	SRAT Receipt	2.5	Sulfate	9/16	2.46	2.49
Simulated Sample Crosscheck Data 500X Dilution	SRAT Receipt	2.5	Oxalate	9/16	2.67	2.67
Simulated Sample Crosscheck Data 500X Dilution	SRAT Receipt	2.5	Phosphate	9/16	2.47	2.56
Simulated Sample Crosscheck Data 500X Dilution	SRAT Receipt	1	Fluoride	9/16	1.02	1.01
Simulated Sample Crosscheck Data 500X Dilution	SRAT Receipt	15	Formate	9/16	15.55	14.75
Simulated Sample Crosscheck Data 500X Dilution	SRAT Receipt	1	Chloride	9/16	0.97	0.99
Simulated Sample Crosscheck Data 500X Dilution	SRAT Receipt	15	Nitrite	9/16	15.59	15.15
Simulated Sample Crosscheck Data 500X Dilution	SRAT Receipt	15	Nitrate	9/16	14.98	15.02
Simulated Sample Crosscheck Data 500X Dilution	SRAT Receipt	2.5	Sulfate	9/16	2.46	2.49
Simulated Sample Crosscheck Data 500X Dilution	SRAT Receipt	2.5	Oxalate	9/16	2.67	2.68
Simulated Sample Crosscheck Data 500X Dilution	SRAT Receipt	2.5	Phosphate	9/16	2.47	2.57
Simulated Sample Crosscheck Data 5000X Dilution	SME	1	Fluoride	9/15	1.03	1.02
Simulated Sample Crosscheck Data 5000X Dilution	SME	6	Formate	9/15	6.15	6.47
Simulated Sample Crosscheck Data 5000X Dilution	SME	1	Chloride	9/15	1.03	1.01
Simulated Sample Crosscheck Data 5000X Dilution	SME	1	Nitrite	9/15	1	1.01
Simulated Sample Crosscheck Data 5000X Dilution	SME	2.5	Nitrate	9/15	2.5	2.56
Simulated Sample Crosscheck Data 5000X Dilution	SME	1	Sulfate	9/15	1.02	1.03
Simulated Sample Crosscheck Data 5000X Dilution	SME	1	Oxalate	9/15	1.1	1.09
Simulated Sample Crosscheck Data 5000X Dilution	SME	1	Phosphate	9/15	1.01	1.06
Simulated Sample Crosscheck Data 5000X Dilution	SME	1	Fluoride	9/15	1.02	1.02
Simulated Sample Crosscheck Data 5000X Dilution	SME	6	Formate	9/15	6.13	6.47
Simulated Sample Crosscheck Data 5000X Dilution	SME	1	Chloride	9/15	0.97	1.01
Simulated Sample Crosscheck Data 5000X Dilution	SME	1	Nitrite	9/15	0.98	1.01
Simulated Sample Crosscheck Data 5000X Dilution	SME	2.5	Nitrate	9/15	2.47	2.56
Simulated Sample Crosscheck Data 5000X Dilution	SME	1	Sulfate	9/15	1	1.03
Simulated Sample Crosscheck Data 5000X Dilution	SME	1	Oxalate	9/15	1.07	1.1
Simulated Sample Crosscheck Data 5000X Dilution	SME	1	Phosphate	9/15	0.99	1.07
Simulated Sample Crosscheck Data 5000X Dilution	SME	1	Fluoride	9/15	1.02	1.02
Simulated Sample Crosscheck Data 5000X Dilution	SME	6	Formate	9/15	6.15	6.46
Simulated Sample Crosscheck Data 5000X Dilution	SME	1	Chloride	9/15	0.97	1.01
Simulated Sample Crosscheck Data 5000X Dilution	SME	1	Nitrite	9/15	0.98	1.01

Table A2. Measurements of Simulants of SRAT Receipt, SRAT Product, and SME, of Standards Used for Calibration, and of Standards from Developed from Dried Salts

Type	Simulant	Known Concentration (ppm)	Anion	Date	M-14 ICS 3000 Measurement (ppm)	M-13 ICS 3000 Measurement (ppm)
Simulated Sample Crosscheck Data 5000X Dilution	SME	2.5	Nitrate	9/15	2.47	2.56
Simulated Sample Crosscheck Data 5000X Dilution	SME	1	Sulfate	9/15	0.99	1.03
Simulated Sample Crosscheck Data 5000X Dilution	SME	1	Oxalate	9/15	1.07	1.09
Simulated Sample Crosscheck Data 5000X Dilution	SME	1	Phosphate	9/15	0.98	1.07
Simulated Sample Crosscheck Data 5000X Dilution	SME	1	Fluoride	9/16	1.03	1.02
Simulated Sample Crosscheck Data 5000X Dilution	SME	6	Formate	9/16	6.14	5.99
Simulated Sample Crosscheck Data 5000X Dilution	SME	1	Chloride	9/16	0.97	1
Simulated Sample Crosscheck Data 5000X Dilution	SME	1	Nitrite	9/16	0.98	1
Simulated Sample Crosscheck Data 5000X Dilution	SME	2.5	Nitrate	9/16	2.46	2.52
Simulated Sample Crosscheck Data 5000X Dilution	SME	1	Sulfate	9/16	1	0.98
Simulated Sample Crosscheck Data 5000X Dilution	SME	1	Oxalate	9/16	1.08	1.03
Simulated Sample Crosscheck Data 5000X Dilution	SME	1	Phosphate	9/16	0.99	1.02
Simulated Sample Crosscheck Data 5000X Dilution	SME	1	Fluoride	9/16	1.02	1.02
Simulated Sample Crosscheck Data 5000X Dilution	SME	6	Formate	9/16	6.15	5.99
Simulated Sample Crosscheck Data 5000X Dilution	SME	1	Chloride	9/16	0.96	1
Simulated Sample Crosscheck Data 5000X Dilution	SME	1	Nitrite	9/16	0.97	1
Simulated Sample Crosscheck Data 5000X Dilution	SME	2.5	Nitrate	9/16	2.44	2.53
Simulated Sample Crosscheck Data 5000X Dilution	SME	1	Sulfate	9/16	0.99	0.98
Simulated Sample Crosscheck Data 5000X Dilution	SME	1	Oxalate	9/16	1.06	1.05
Simulated Sample Crosscheck Data 5000X Dilution	SME	1	Phosphate	9/16	0.97	1.03
Simulated Sample Crosscheck Data 5000X Dilution	SRAT Receipt	1	Fluoride	9/15	1.02	1.02
Simulated Sample Crosscheck Data 5000X Dilution	SRAT Receipt	1.5	Formate	9/15	1.52	1.52
Simulated Sample Crosscheck Data 5000X Dilution	SRAT Receipt	1	Chloride	9/15	0.96	1
Simulated Sample Crosscheck Data 5000X Dilution	SRAT Receipt	1.5	Nitrite	9/15	1.49	1.52
Simulated Sample Crosscheck Data 5000X Dilution	SRAT Receipt	1.5	Nitrate	9/15	1.39	1.46
Simulated Sample Crosscheck Data 5000X Dilution	SRAT Receipt	1	Sulfate	9/15	0.99	1.03
Simulated Sample Crosscheck Data 5000X Dilution	SRAT Receipt	1	Oxalate	9/15	1.06	1.09
Simulated Sample Crosscheck Data 5000X Dilution	SRAT Receipt	1	Phosphate	9/15	0.99	1.08
Simulated Sample Crosscheck Data 5000X Dilution	SRAT Receipt	1	Fluoride	9/15	1.02	1.02
Simulated Sample Crosscheck Data 5000X Dilution	SRAT Receipt	1.5	Formate	9/15	1.51	1.52
Simulated Sample Crosscheck Data 5000X Dilution	SRAT Receipt	1	Chloride	9/15	0.99	1
Simulated Sample Crosscheck Data 5000X Dilution	SRAT Receipt	1.5	Nitrite	9/15	1.49	1.52
Simulated Sample Crosscheck Data 5000X Dilution	SRAT Receipt	1.5	Nitrate	9/15	1.38	1.46
Simulated Sample Crosscheck Data 5000X Dilution	SRAT Receipt	1	Sulfate	9/15	1	1.03
Simulated Sample Crosscheck Data 5000X Dilution	SRAT Receipt	1	Oxalate	9/15	1.06	1.09
Simulated Sample Crosscheck Data 5000X Dilution	SRAT Receipt	1	Phosphate	9/15	1	1.08
Simulated Sample Crosscheck Data 5000X Dilution	SRAT Receipt	1	Fluoride	9/15	1.02	1.02
Simulated Sample Crosscheck Data 5000X Dilution	SRAT Receipt	1.5	Formate	9/15	1.51	1.52
Simulated Sample Crosscheck Data 5000X Dilution	SRAT Receipt	1	Chloride	9/15	0.96	1
Simulated Sample Crosscheck Data 5000X Dilution	SRAT Receipt	1.5	Nitrite	9/15	1.48	1.52
Simulated Sample Crosscheck Data 5000X Dilution	SRAT Receipt	1.5	Nitrate	9/15	1.37	1.47
Simulated Sample Crosscheck Data 5000X Dilution	SRAT Receipt	1	Sulfate	9/15	0.99	1.03
Simulated Sample Crosscheck Data 5000X Dilution	SRAT Receipt	1	Oxalate	9/15	1.06	1.1
Simulated Sample Crosscheck Data 5000X Dilution	SRAT Receipt	1	Phosphate	9/15	0.99	1.08
Simulated Sample Crosscheck Data 5000X Dilution	SRAT Receipt	1	Fluoride	9/16	1.02	1.02
Simulated Sample Crosscheck Data 5000X Dilution	SRAT Receipt	1.5	Formate	9/16	1.51	1.49
Simulated Sample Crosscheck Data 5000X Dilution	SRAT Receipt	1	Chloride	9/16	0.95	1
Simulated Sample Crosscheck Data 5000X Dilution	SRAT Receipt	1.5	Nitrite	9/16	1.48	1.51
Simulated Sample Crosscheck Data 5000X Dilution	SRAT Receipt	1.5	Nitrate	9/16	1.38	1.44
Simulated Sample Crosscheck Data 5000X Dilution	SRAT Receipt	1	Sulfate	9/16	0.99	1

Table A2. Measurements of Simulants of SRAT Receipt, SRAT Product, and SME, of Standards Used for Calibration, and of Standards from Developed from Dried Salts

Type	Simulant	Known Concentration (ppm)	Anion	Date	M-14 ICS 3000 Measurement (ppm)	M-13 ICS 3000 Measurement (ppm)
Simulated Sample Crosscheck Data 5000X Dilution	SRAT Receipt	1	Oxalate	9/16	1.06	1.05
Simulated Sample Crosscheck Data 5000X Dilution	SRAT Receipt	1	Phosphate	9/16	0.98	1.06
Simulated Sample Crosscheck Data 5000X Dilution	SRAT Receipt	1	Fluoride	9/16	1.02	1.02
Simulated Sample Crosscheck Data 5000X Dilution	SRAT Receipt	1.5	Formate	9/16	1.51	1.5
Simulated Sample Crosscheck Data 5000X Dilution	SRAT Receipt	1	Chloride	9/16	0.95	1
Simulated Sample Crosscheck Data 5000X Dilution	SRAT Receipt	1.5	Nitrite	9/16	1.48	1.51
Simulated Sample Crosscheck Data 5000X Dilution	SRAT Receipt	1.5	Nitrate	9/16	1.38	1.44
Simulated Sample Crosscheck Data 5000X Dilution	SRAT Receipt	1	Sulfate	9/16	0.99	1
Simulated Sample Crosscheck Data 5000X Dilution	SRAT Receipt	1	Oxalate	9/16	1.06	1.06
Simulated Sample Crosscheck Data 5000X Dilution	SRAT Receipt	1	Phosphate	9/16	0.98	1.07
1 ppm Calibration Standard as a sample	standard	1	Fluoride	9/15	1.04	1.03
1 ppm Calibration Standard as a sample	standard	1	Formate	9/15	1.03	0.96
1 ppm Calibration Standard as a sample	standard	1	Chloride	9/15	0.97	1
1 ppm Calibration Standard as a sample	standard	1	Nitrite	9/15	1	1.01
1 ppm Calibration Standard as a sample	standard	1	Nitrate	9/15	1.03	1.07
1 ppm Calibration Standard as a sample	standard	1	Sulfate	9/15	1.01	1.03
1 ppm Calibration Standard as a sample	standard	1	Oxalate	9/15	1.07	1.08
1 ppm Calibration Standard as a sample	standard	1	Phosphate	9/15	1.01	1.06
1 ppm Calibration Standard as a sample	standard	1	Fluoride	9/16	1.03	1.02
1 ppm Calibration Standard as a sample	standard	1	Formate	9/16	1.01	1
1 ppm Calibration Standard as a sample	standard	1	Chloride	9/16	0.95	0.99
1 ppm Calibration Standard as a sample	standard	1	Nitrite	9/16	0.97	1
1 ppm Calibration Standard as a sample	standard	1	Nitrate	9/16	1	1.06
1 ppm Calibration Standard as a sample	standard	1	Sulfate	9/16	0.99	1.01
1 ppm Calibration Standard as a sample	standard	1	Oxalate	9/16	1.05	1.07
1 ppm Calibration Standard as a sample	standard	1	Phosphate	9/16	0.97	1.09
1 ppm Calibration Standard as a sample	standard	1	Fluoride	9/16	1.03	1.02
1 ppm Calibration Standard as a sample	standard	1	Formate	9/16	1.01	1
1 ppm Calibration Standard as a sample	standard	1	Chloride	9/16	0.94	0.99
1 ppm Calibration Standard as a sample	standard	1	Nitrite	9/16	0.96	1.01
1 ppm Calibration Standard as a sample	standard	1	Nitrate	9/16	0.99	1.06
1 ppm Calibration Standard as a sample	standard	1	Sulfate	9/16	0.99	1.01
1 ppm Calibration Standard as a sample	standard	1	Oxalate	9/16	1.05	1.07
1 ppm Calibration Standard as a sample	standard	1	Phosphate	9/16	0.97	1.1
10 ppm Calibration Standard as a sample	standard	10	Fluoride	9/15	9.97	10
10 ppm Calibration Standard as a sample	standard	10	Formate	9/15	9.96	10.47
10 ppm Calibration Standard as a sample	standard	10	Chloride	9/15	9.99	10.01
10 ppm Calibration Standard as a sample	standard	10	Nitrite	9/15	10.01	10.02
10 ppm Calibration Standard as a sample	standard	10	Nitrate	9/15	10.03	10.07
10 ppm Calibration Standard as a sample	standard	10	Sulfate	9/15	10.02	10.11
10 ppm Calibration Standard as a sample	standard	10	Oxalate	9/15	10.12	10.09
10 ppm Calibration Standard as a sample	standard	10	Phosphate	9/15	10.03	10.34
10 ppm Calibration Standard as a sample	standard	10	Fluoride	9/16	9.98	9.97
10 ppm Calibration Standard as a sample	standard	10	Formate	9/16	9.97	10.03
10 ppm Calibration Standard as a sample	standard	10	Chloride	9/16	9.95	9.99
10 ppm Calibration Standard as a sample	standard	10	Nitrite	9/16	9.93	10.02
10 ppm Calibration Standard as a sample	standard	10	Nitrate	9/16	9.94	10.03
10 ppm Calibration Standard as a sample	standard	10	Sulfate	9/16	9.97	10.07
10 ppm Calibration Standard as a sample	standard	10	Oxalate	9/16	10.17	10.14
10 ppm Calibration Standard as a sample	standard	10	Phosphate	9/16	10.02	10.24

Table A2. Measurements of Simulants of SRAT Receipt, SRAT Product, and SME, of Standards Used for Calibration, and of Standards from Developed from Dried Salts

Type	Simulant	Known Concentration (ppm)	Anion	Date	M-14 ICS 3000 Measurement (ppm)	M-13 ICS 3000 Measurement (ppm)
10 ppm Calibration Standard as a sample	standard	10	Fluoride	9/16	9.97	9.98
10 ppm Calibration Standard as a sample	standard	10	Formate	9/16	9.97	10.04
10 ppm Calibration Standard as a sample	standard	10	Chloride	9/16	9.96	9.99
10 ppm Calibration Standard as a sample	standard	10	Nitrite	9/16	9.94	10.04
10 ppm Calibration Standard as a sample	standard	10	Nitrate	9/16	9.95	10.04
10 ppm Calibration Standard as a sample	standard	10	Sulfate	9/16	9.97	10.08
10 ppm Calibration Standard as a sample	standard	10	Oxalate	9/16	10.18	10.14
10 ppm Calibration Standard as a sample	standard	10	Phosphate	9/16	10.03	10.26
20 ppm Calibration Standard as a sample	standard	20	Fluoride	9/15	19.9	20.04
20 ppm Calibration Standard as a sample	standard	20	Formate	9/15	19.89	19.81
20 ppm Calibration Standard as a sample	standard	20	Chloride	9/15	19.96	20.01
20 ppm Calibration Standard as a sample	standard	20	Nitrite	9/15	19.99	19.97
20 ppm Calibration Standard as a sample	standard	20	Nitrate	9/15	19.99	20.06
20 ppm Calibration Standard as a sample	standard	20	Sulfate	9/15	19.98	20.1
20 ppm Calibration Standard as a sample	standard	20	Oxalate	9/15	20.27	20.06
20 ppm Calibration Standard as a sample	standard	20	Phosphate	9/15	20.03	20.32
20 ppm Calibration Standard as a sample	standard	20	Fluoride	9/16	19.95	19.98
20 ppm Calibration Standard as a sample	standard	20	Formate	9/16	19.92	20.14
20 ppm Calibration Standard as a sample	standard	20	Chloride	9/16	19.92	20
20 ppm Calibration Standard as a sample	standard	20	Nitrite	9/16	19.86	20.13
20 ppm Calibration Standard as a sample	standard	20	Nitrate	9/16	19.93	20.04
20 ppm Calibration Standard as a sample	standard	20	Sulfate	9/16	19.88	20.04
20 ppm Calibration Standard as a sample	standard	20	Oxalate	9/16	20.31	20.21
20 ppm Calibration Standard as a sample	standard	20	Phosphate	9/16	20.04	20.26
20 ppm Calibration Standard as a sample	standard	20	Fluoride	9/16	19.96	19.98
20 ppm Calibration Standard as a sample	standard	20	Formate	9/16	19.93	20.14
20 ppm Calibration Standard as a sample	standard	20	Chloride	9/16	19.93	19.99
20 ppm Calibration Standard as a sample	standard	20	Nitrite	9/16	19.85	20
20 ppm Calibration Standard as a sample	standard	20	Nitrate	9/16	19.95	20.02
20 ppm Calibration Standard as a sample	standard	20	Sulfate	9/16	19.91	20.04
20 ppm Calibration Standard as a sample	standard	20	Oxalate	9/16	20.34	20.22
20 ppm Calibration Standard as a sample	standard	20	Phosphate	9/16	20.06	20.26
10 ppm Standards prepared from dried salts	standard	10	Fluoride	9/17	10.12	9.96
10 ppm Standards prepared from dried salts	standard	10	Formate	9/17	10.3	9.89
10 ppm Standards prepared from dried salts	standard	10	Chloride	9/17	10	9.77
10 ppm Standards prepared from dried salts	standard	10	Nitrite	9/17	10.58	10.25
10 ppm Standards prepared from dried salts	standard	10	Nitrate	9/17	9.89	10.01
10 ppm Standards prepared from dried salts	standard	10	Sulfate	9/17	10.29	10.23
10 ppm Standards prepared from dried salts	standard	10	Oxalate	9/17	10.29	10.11
10 ppm Standards prepared from dried salts	standard	10	Phosphate	9/17	9.54	10.06
10 ppm Standards prepared from dried salts	standard	10	Fluoride	9/17	10.13	9.97
10 ppm Standards prepared from dried salts	standard	10	Formate	9/17	10.3	9.89
10 ppm Standards prepared from dried salts	standard	10	Chloride	9/17	9.97	9.75
10 ppm Standards prepared from dried salts	standard	10	Nitrite	9/17	10.58	10.25
10 ppm Standards prepared from dried salts	standard	10	Nitrate	9/17	9.89	9.96
10 ppm Standards prepared from dried salts	standard	10	Sulfate	9/17	10.18	10.14
10 ppm Standards prepared from dried salts	standard	10	Oxalate	9/17	10.3	10.05
10 ppm Standards prepared from dried salts	standard	10	Phosphate	9/17	9.55	9.63

Exhibit A1.a Type of Sample=standard, Anion=Chloride, Bottle ID=16ppm

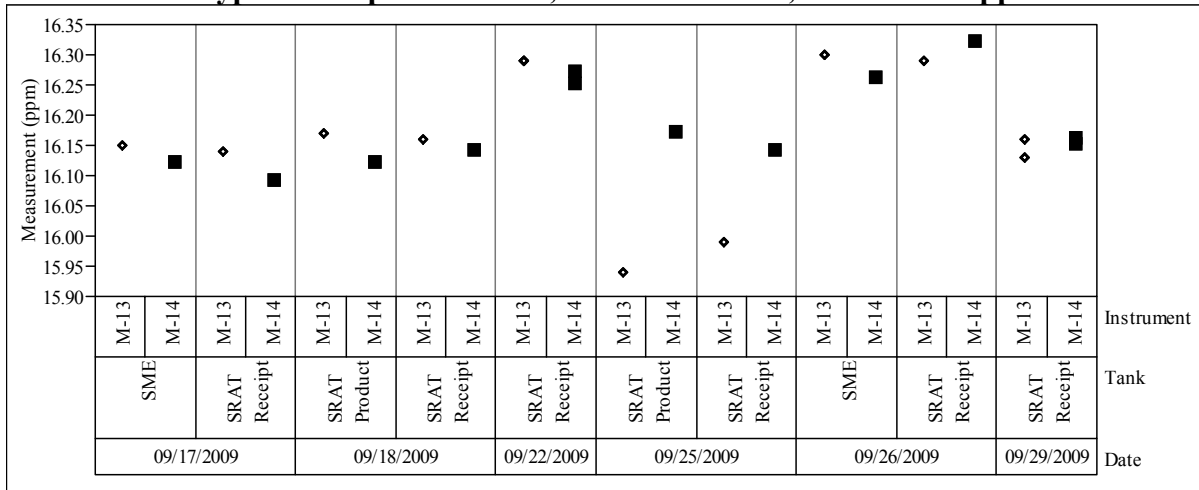


Exhibit A1b. Type of Sample=standard, Anion=Chloride, Bottle ID=2ppm

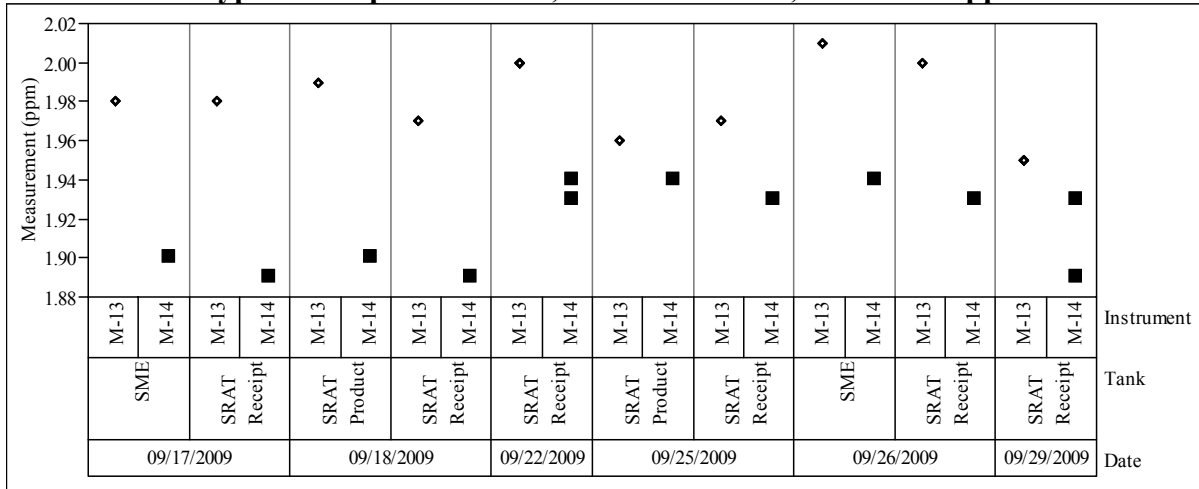


Exhibit A1c. Type of Sample=standard, Anion=Fluoride, Bottle ID=16ppm

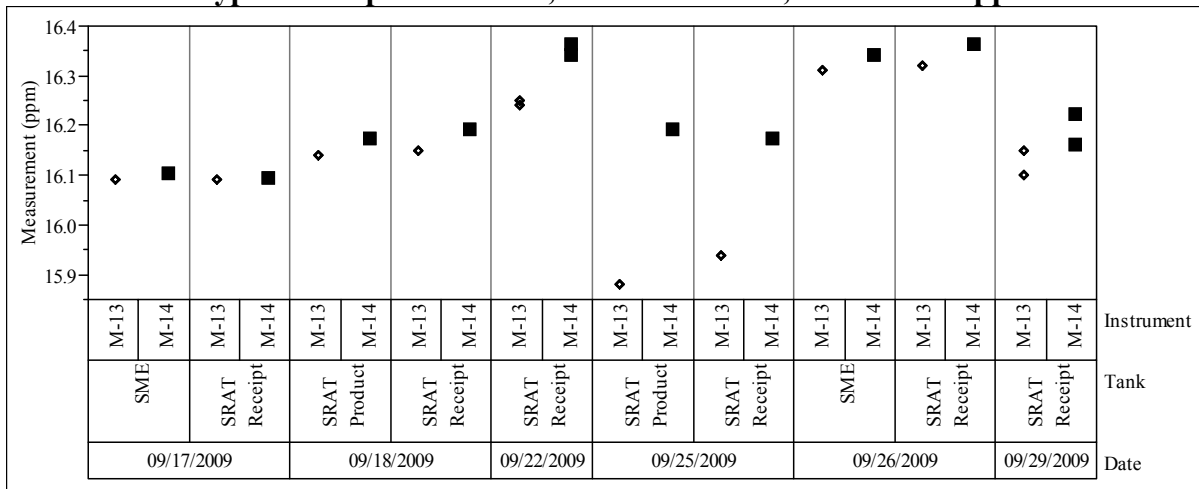


Exhibit A1d. Type of Sample=standard, Anion=Fluoride, Bottle ID=2ppm

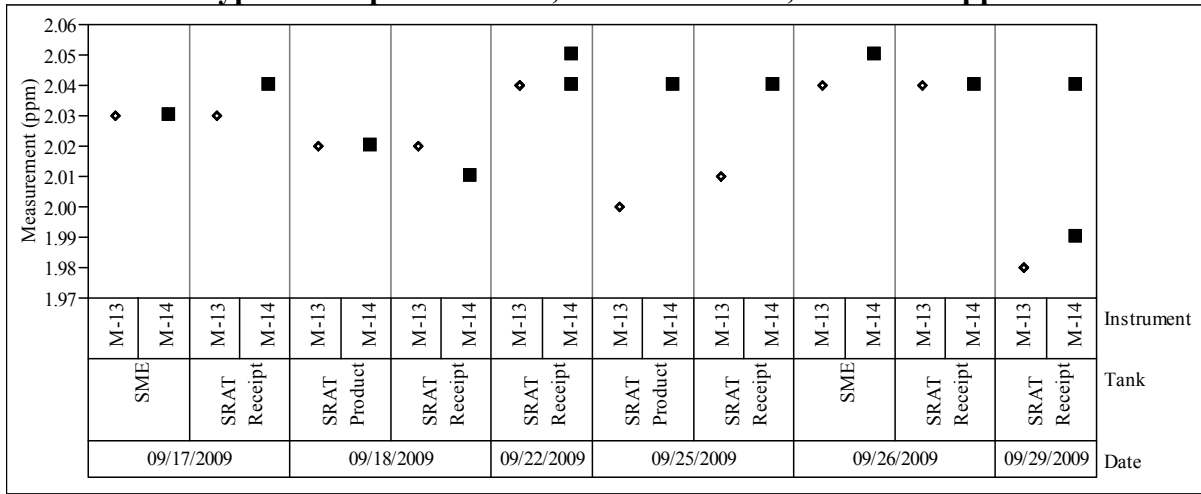


Exhibit A1e. Type of Sample=standard, Anion=Formate, Bottle ID=16ppm

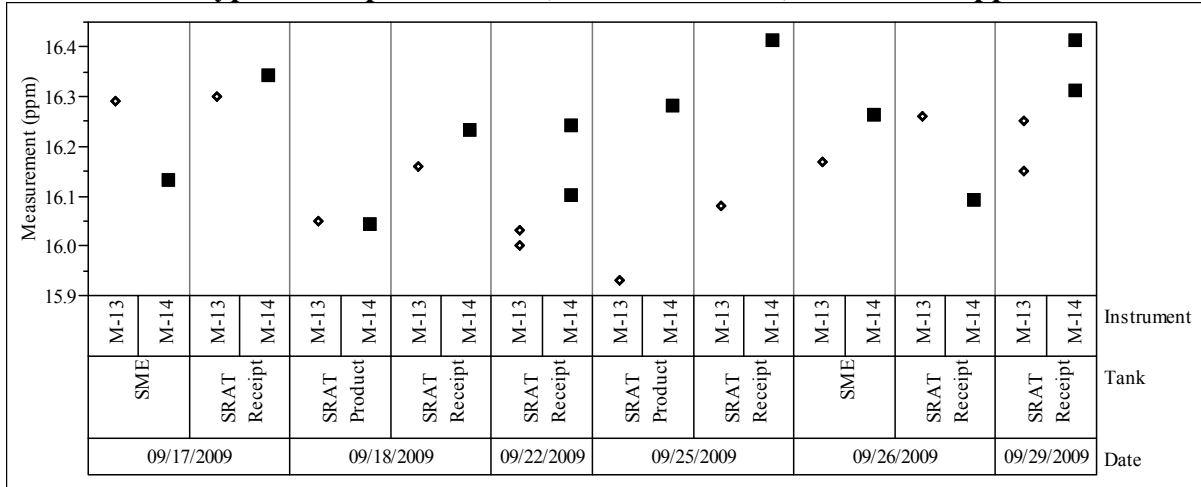


Exhibit A1f. Type of Sample=standard, Anion=Formate, Bottle ID=2ppm

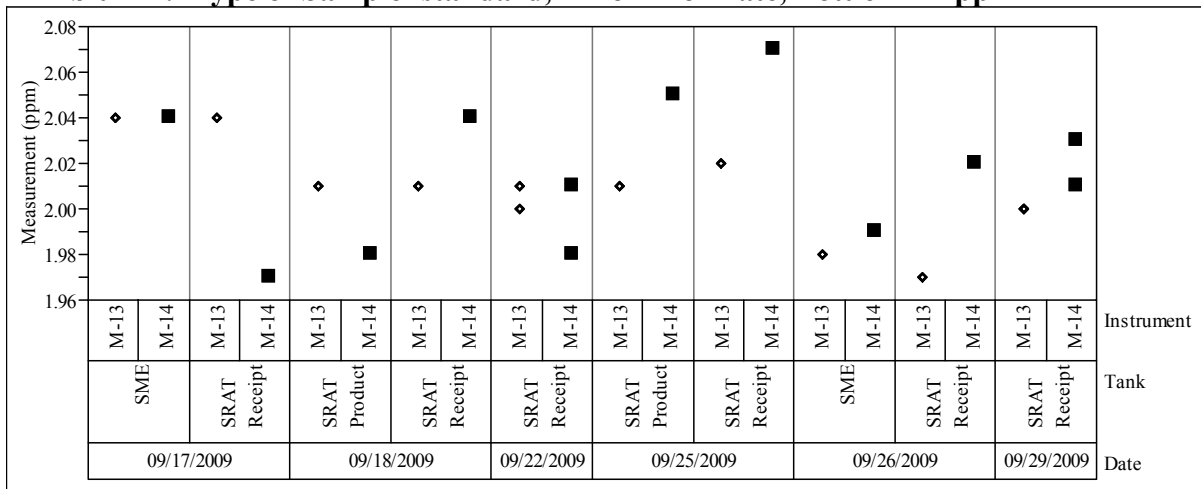


Exhibit A1g. Type of Sample=standard, Anion=Nitrate, Bottle ID=16ppm

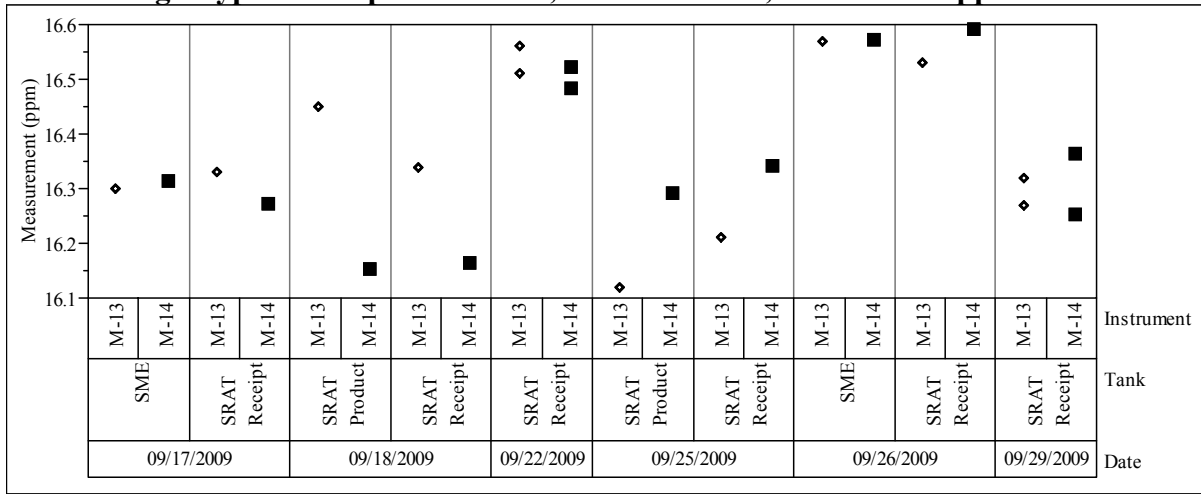


Exhibit A1h. Type of Sample=standard, Anion=Nitrate, Bottle ID=2ppm

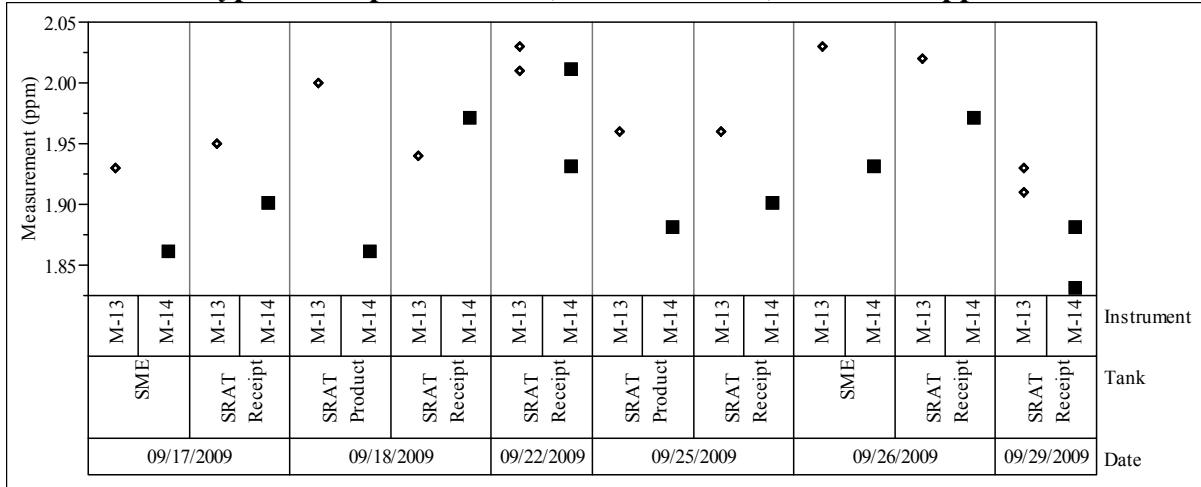


Exhibit A1i. Type of Sample=standard, Anion=Nitrite, Bottle ID=16ppm

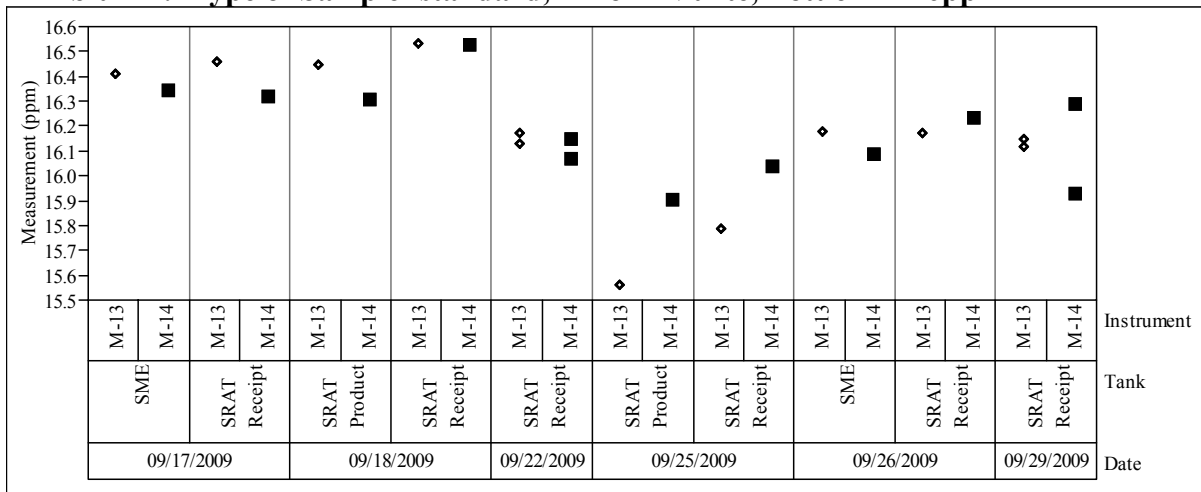


Exhibit A1j. Type of Sample=standard, Anion=Nitrite, Bottle ID=2ppm

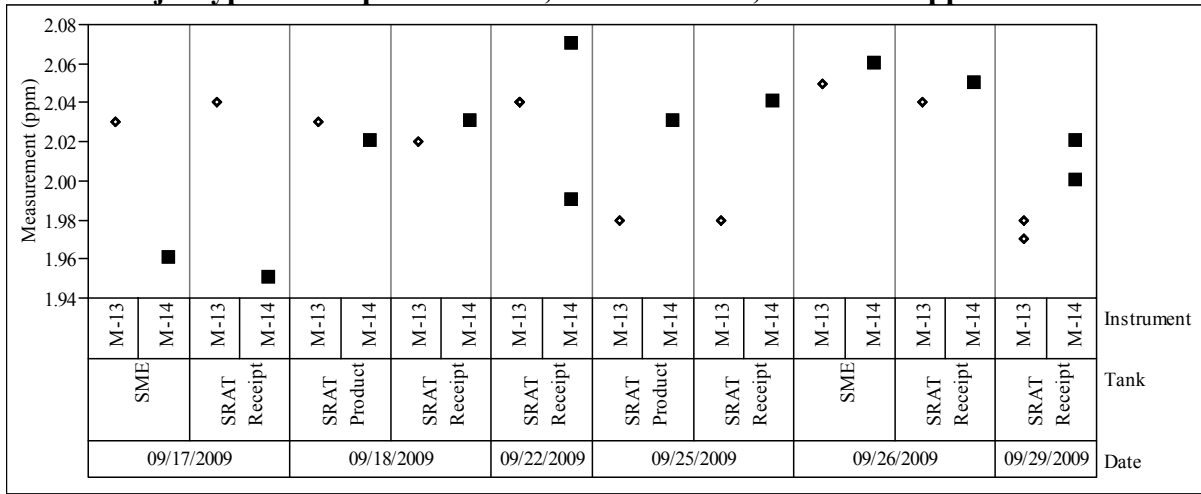


Exhibit A1k. Type of Sample=standard, Anion=Oxalate, Bottle ID=16ppm

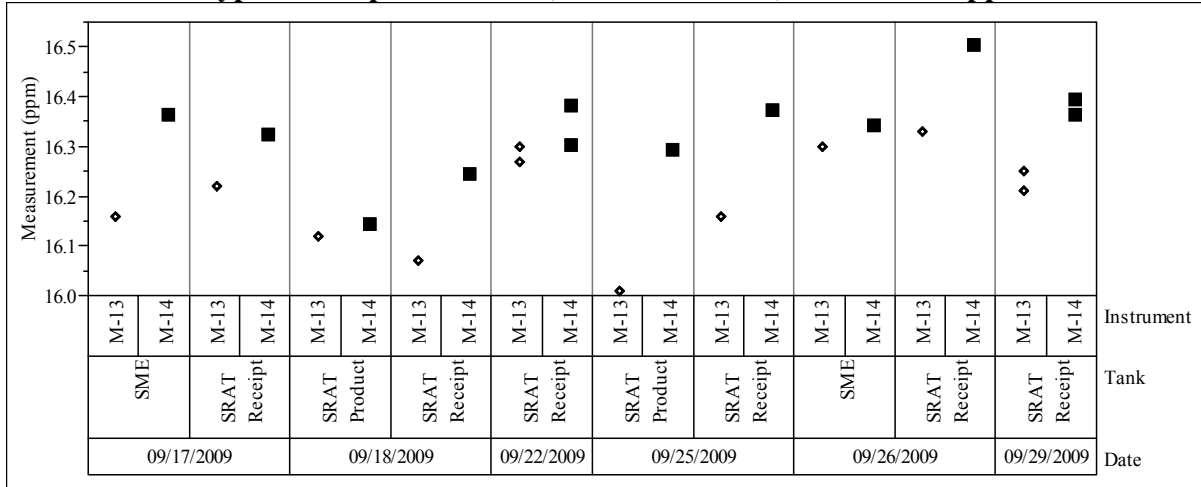


Exhibit A1l. Type of Sample=standard, Anion=Oxalate, Bottle ID=2ppm

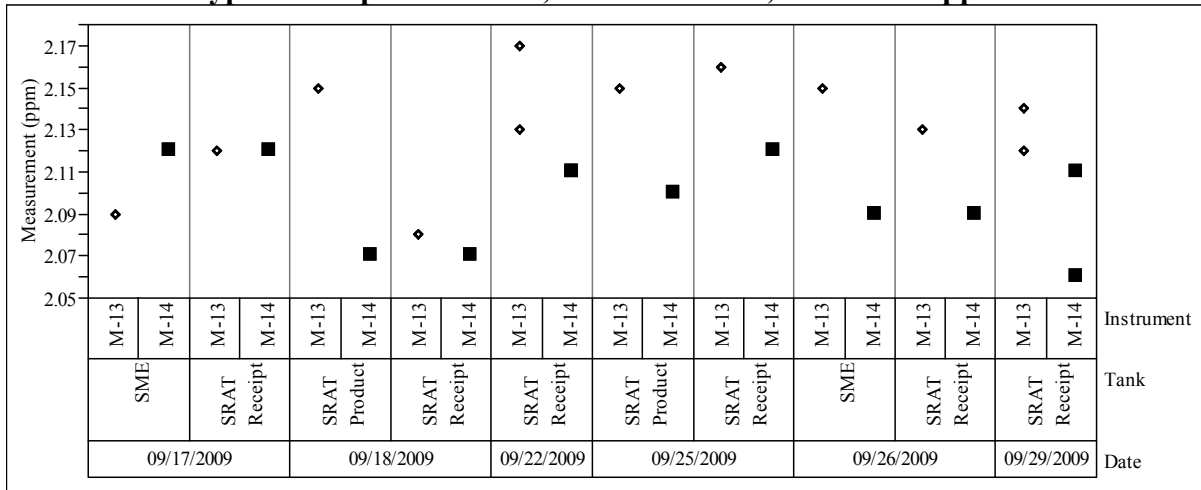


Exhibit A1m. Type of Sample=standard, Anion=Phosphate, Bottle ID=16ppm

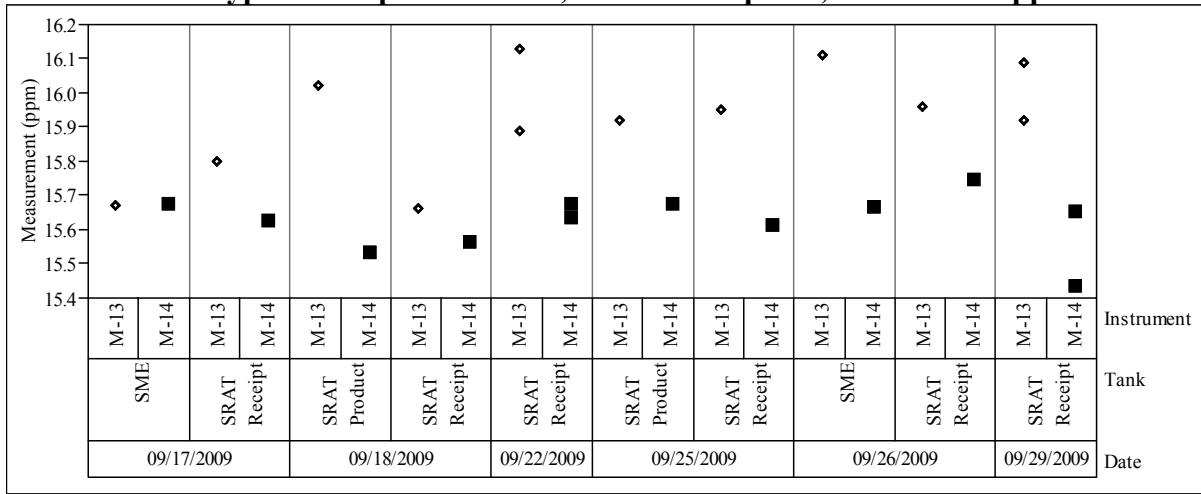


Exhibit A1n. Type of Sample=standard, Anion=Phosphate, Bottle ID=2ppm

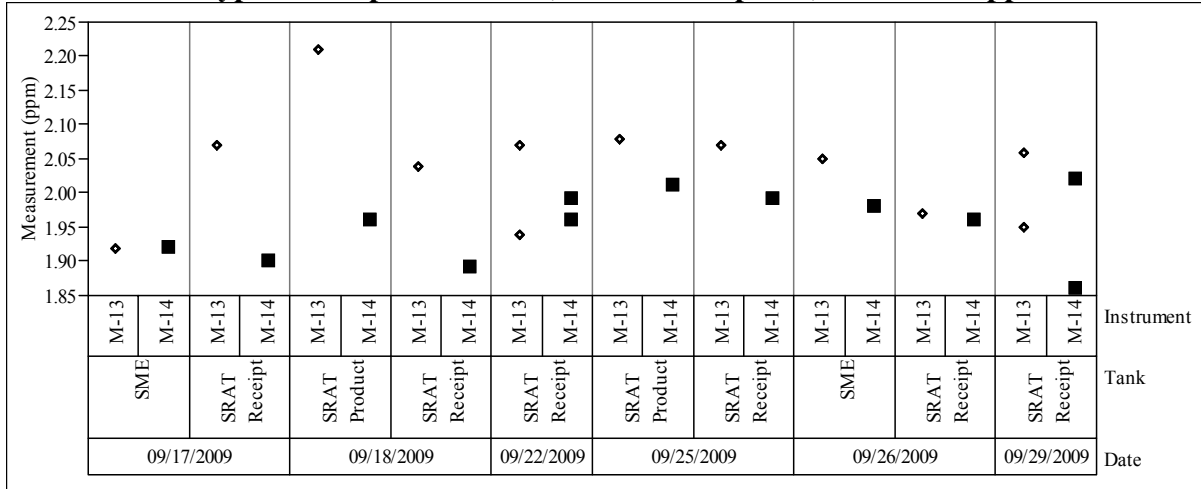


Exhibit A1o. Type of Sample=standard, Anion=Sulfate, Bottle ID=16ppm

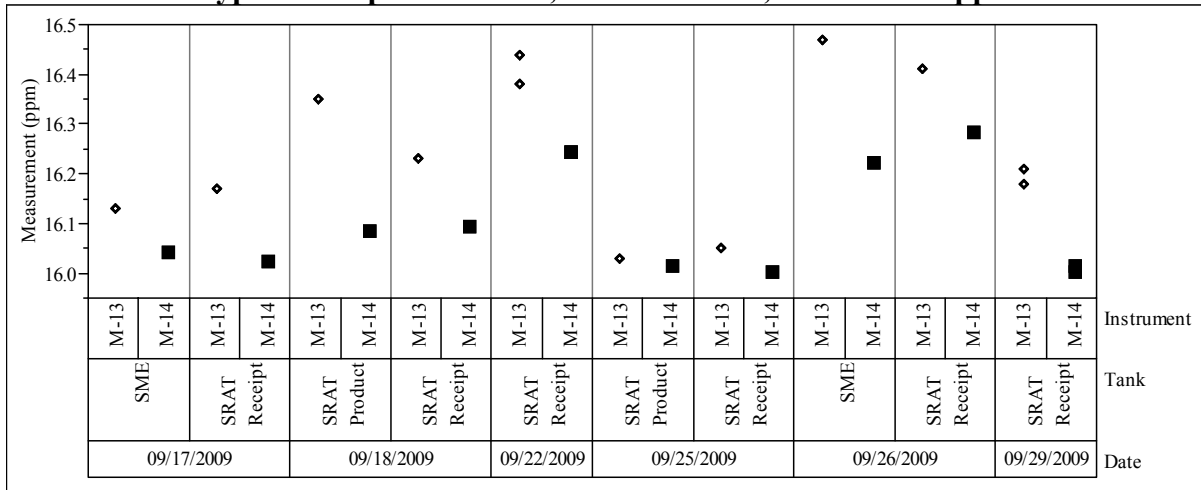


Exhibit A1p. Type of Sample=standard, Anion=Sulfate, Bottle ID=2ppm

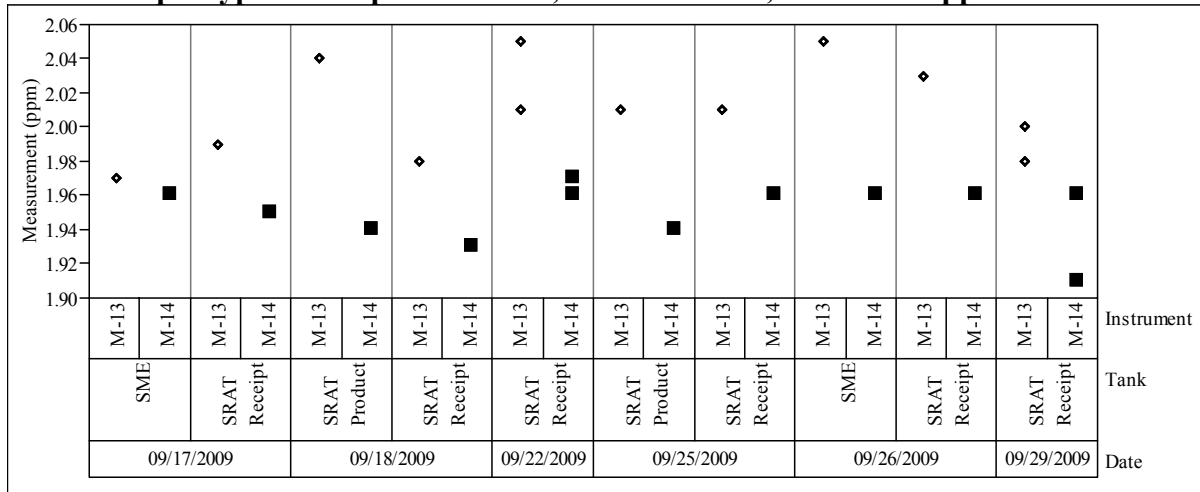


Exhibit A2a. Type of Sample=process, Anion=Formate; Raw Score Difference (ppm) (M13-M14)
 (SR – SRAT Receipt; SP – SRAT Product)

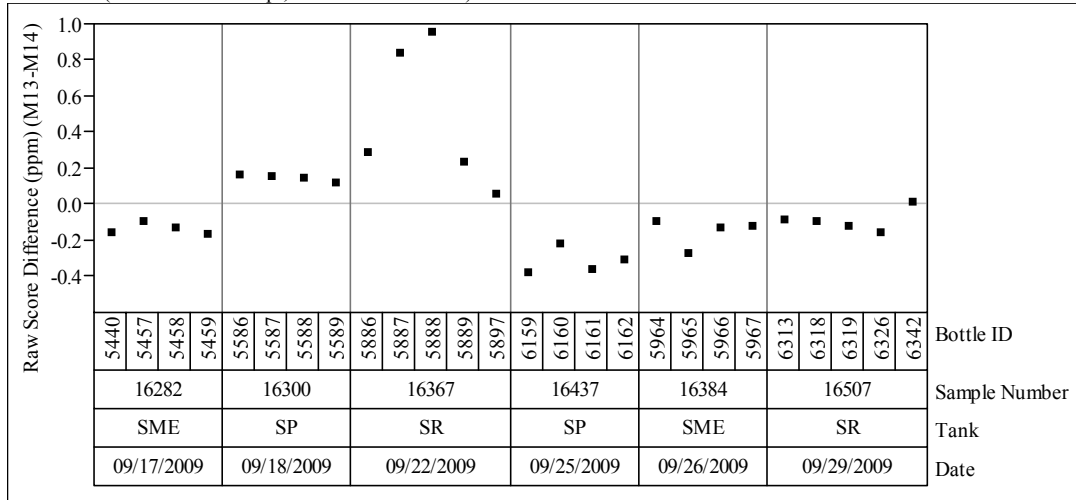


Exhibit A2b. Type of Sample=process, Anion=Nitrate; Raw Score Difference (ppm) (M13-M14)
 (SR – SRAT Receipt; SP – SRAT Product)

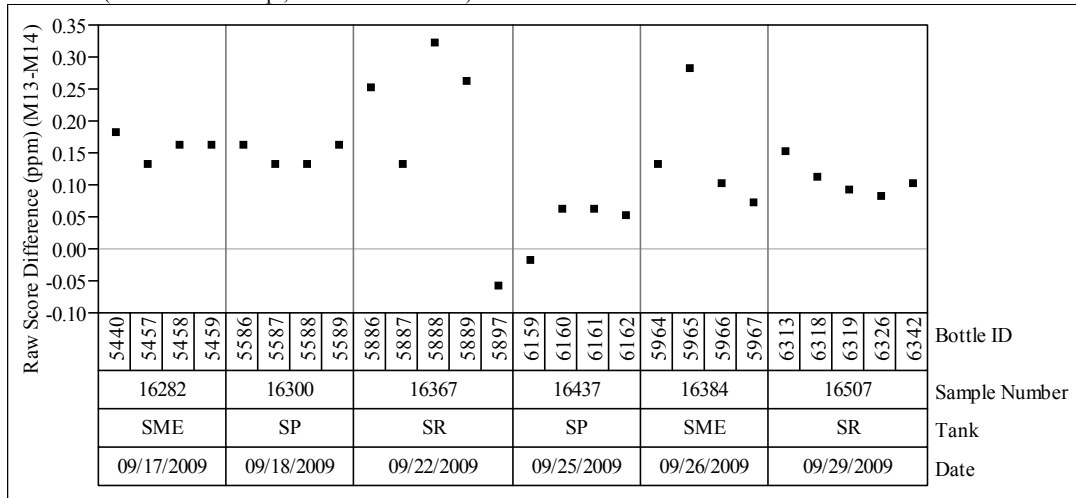


Exhibit A2c. Type of Sample=process, Anion=Nitrite; Raw Score Difference (ppm) (M13-M14)
(SR – SRAT Receipt)

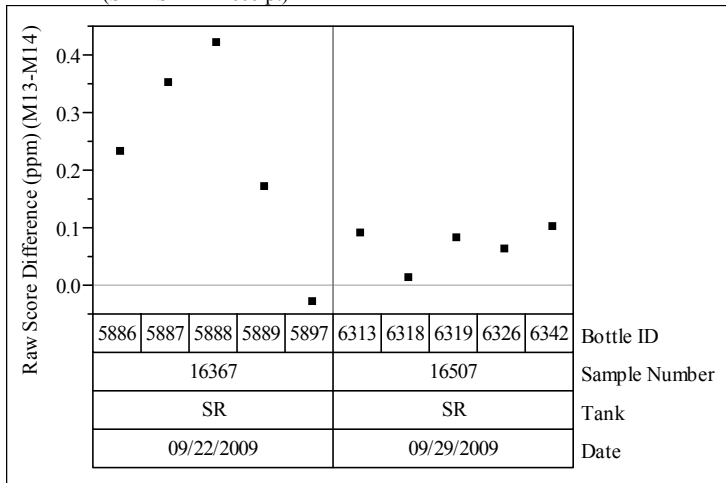


Exhibit A2d. Type of Sample=process, Anion=Oxalate; Raw Score Difference (ppm) (M13-M14)
(SR – SRAT Receipt)

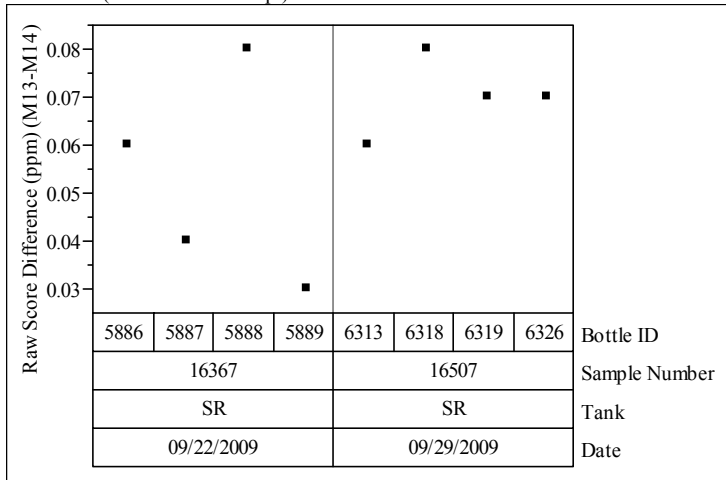


Exhibit A2e. Type of Sample=process, Anion=Sulfate; Raw Score Difference (ppm) (M13-M14)
(SR – SRAT Receipt; SP – SRAT Product)

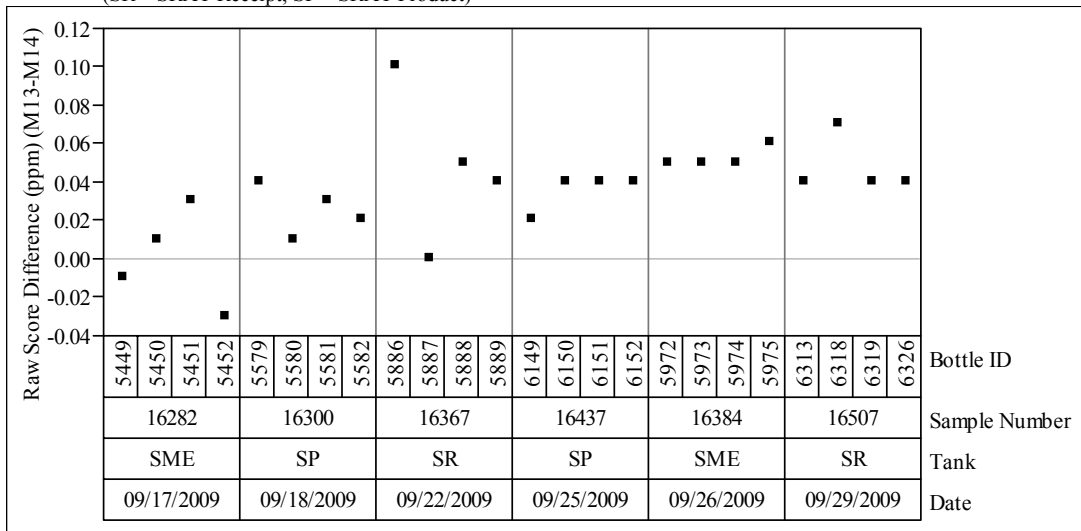


Exhibit 3a. Type=Simulated Sample Crosscheck Data 5000X Dilution, Known Concentration (ppm)=1

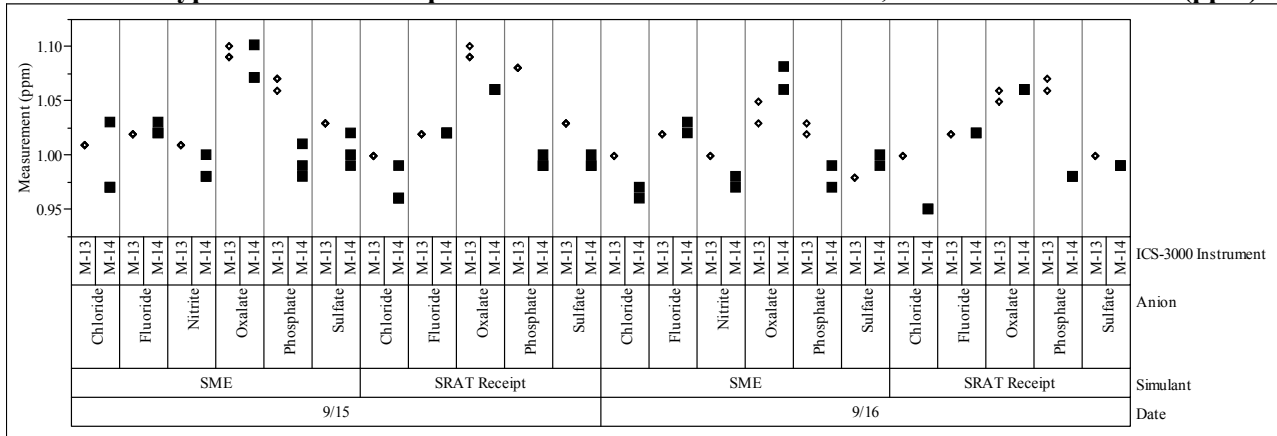


Exhibit 3b. Type=Simulated Sample Crosscheck Data 5000X Dilution, Known Concentration (ppm)=1.5

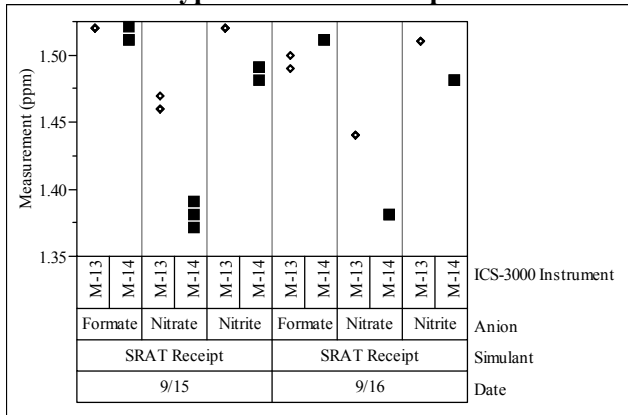


Exhibit 3c. Type=Simulated Sample Crosscheck Data 5000X Dilution, Known Concentration (ppm)=2.5

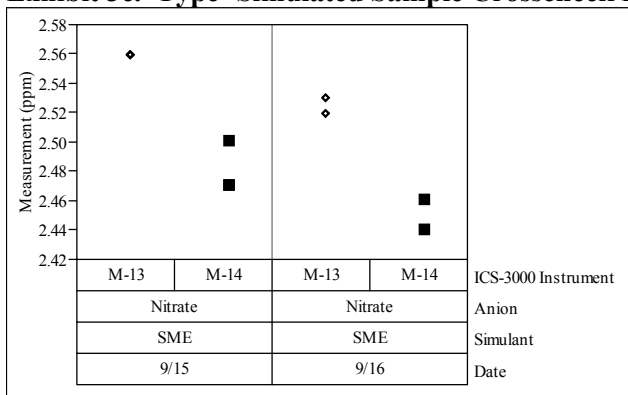


Exhibit 3d. Type=Simulated Sample Crosscheck Data 5000X Dilution, Known Concentration (ppm)=6

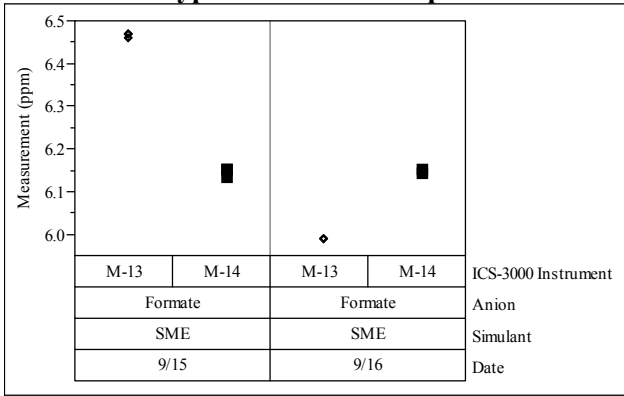


Exhibit 3e. Type=Simulated Sample Crosscheck Data 500X Dilution, Known Concentration (ppm)=1

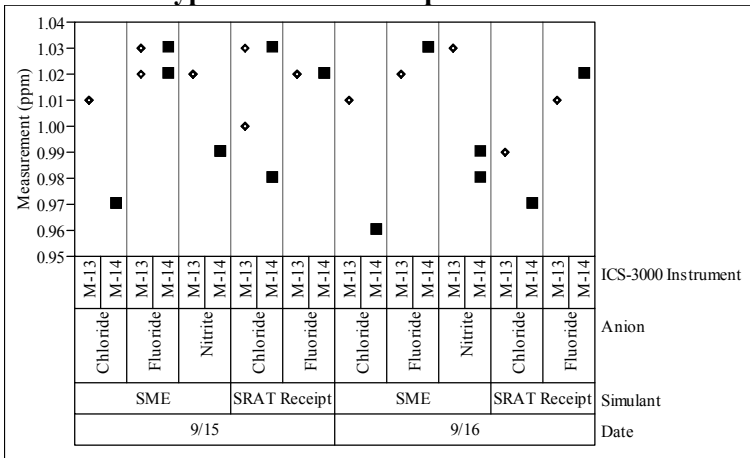


Exhibit 3f. Type=Simulated Sample Crosscheck Data 500X Dilution, Known Concentration (ppm)=2.5

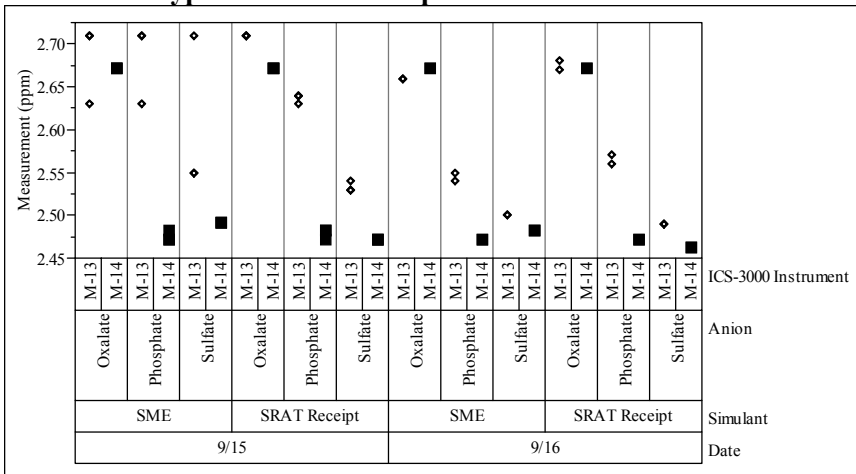


Exhibit 3g. Type=Simulated Sample Crosscheck Data 500X Dilution, Known Concentration (ppm)=15

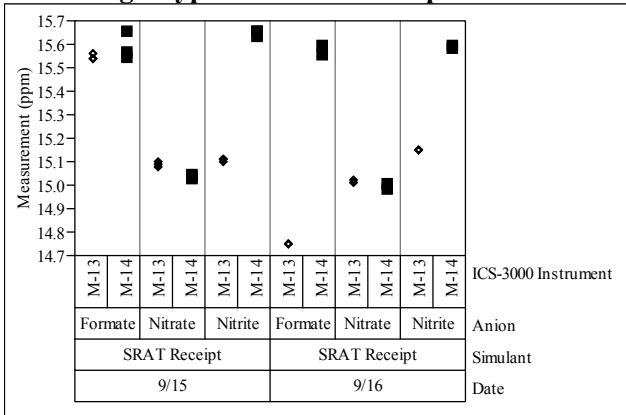
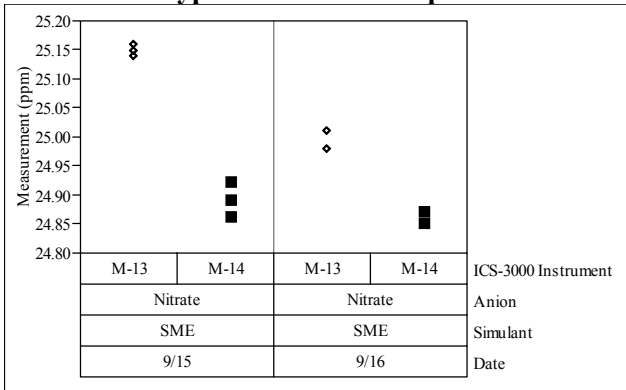
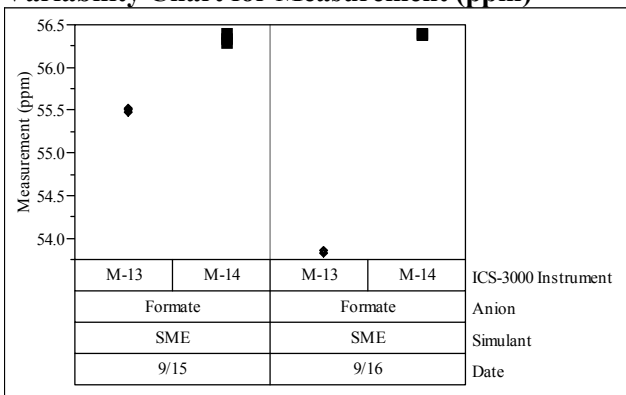


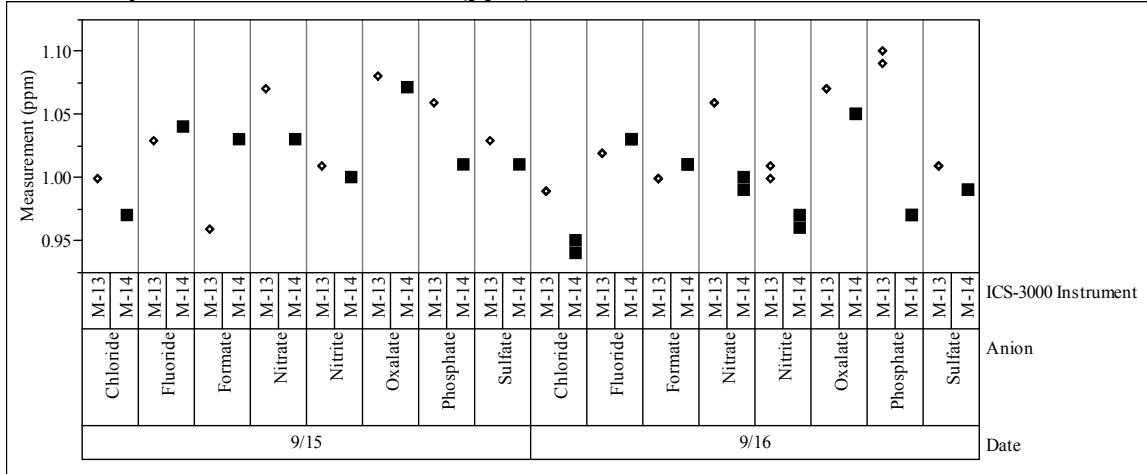
Exhibit 3h. Type=Simulated Sample Crosscheck Data 500X Dilution, Known Concentration (ppm)=25



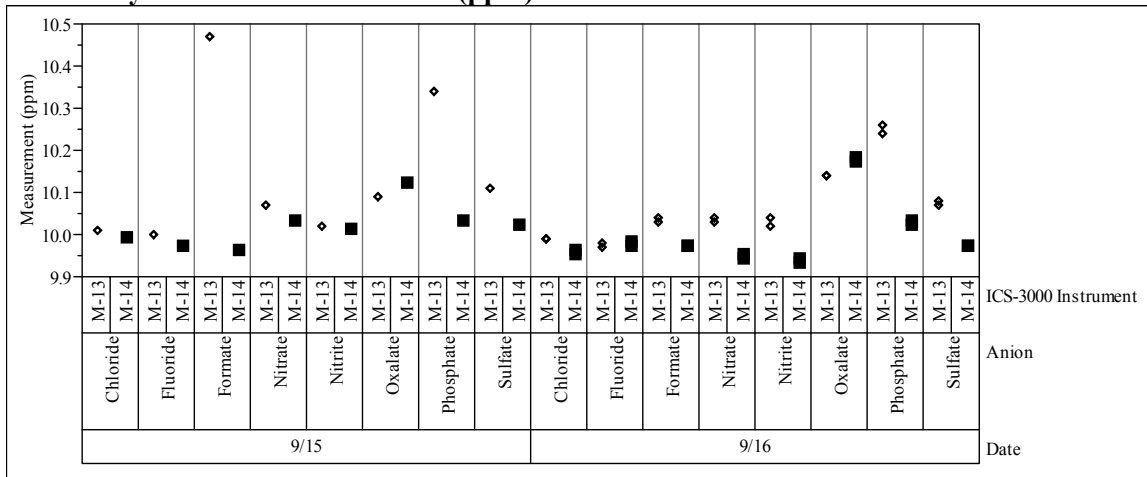
**Exhibit 3i. Type=Simulated Sample Crosscheck Data 500X Dilution, Known Concentration (ppm)=60
Variability Chart for Measurement (ppm)**



**Exhibit 4a. Type=1 ppm Calibration Standard as a sample
Variability Chart for Measurement (ppm)**



**Exhibit 4b. Type=10 ppm Calibration Standard as a sample
Variability Chart for Measurement (ppm)**



**Exhibit 4c. Type=20 ppm Calibration Standard as a sample
Variability Chart for Measurement (ppm)**

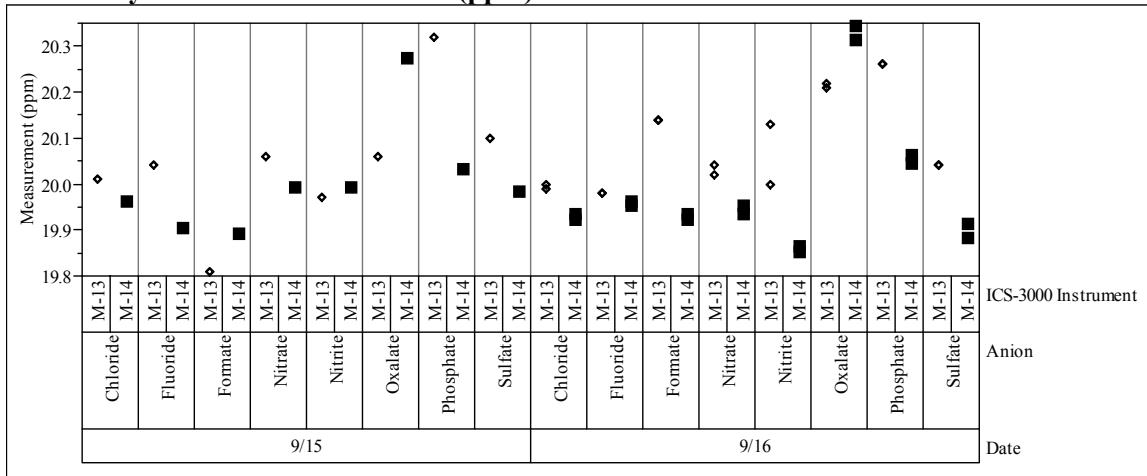


Exhibit A5. Type=10 ppm Standards prepared from dried salts

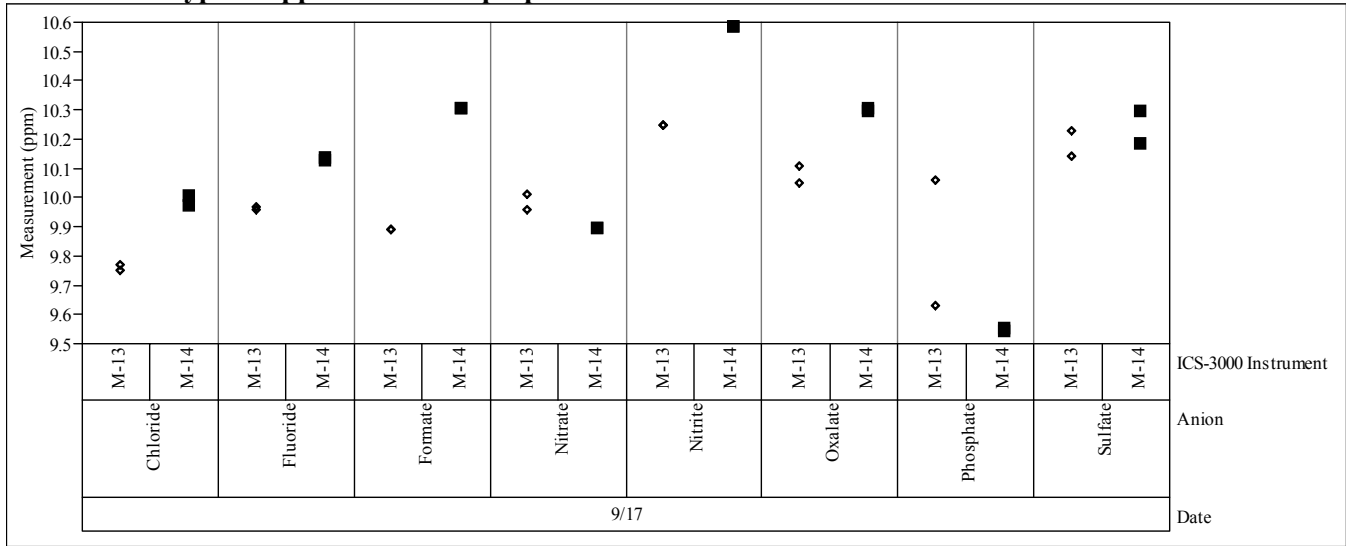
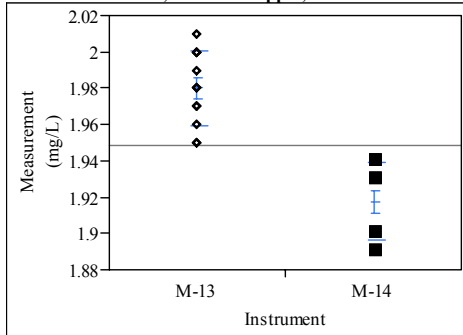


Exhibit A6a.

Oneway Analysis of Measurement (ppm) By Instrument Type of Measurement=Raw, Bottle ID=2ppm, Anion=Chloride



Means and Std Deviations

Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
M-13	12	1.98000	0.020449	0.00590	1.9670	1.9930
M-14	12	1.91750	0.021373	0.00617	1.9039	1.9311

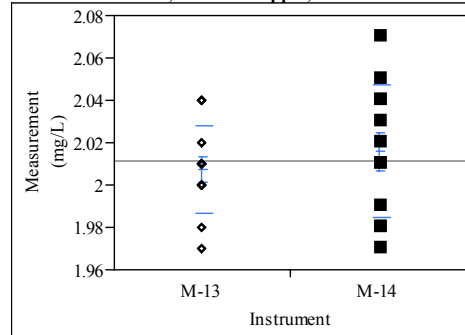
Tests that the Variances are Equal

Level	Count	Std Dev	MeanAbsDif to Mean	MeanAbsDif to Median
M-13	12	0.0204495	0.0166667	0.0166667
M-14	12	0.0213733	0.0195833	0.0175000

Test	F Ratio	DFNum	DFDen	p-Value
O'Brien[.5]	0.0750	1	22	0.7867
Brown-Forsythe	0.0204	1	22	0.8877
Levene	0.6646	1	22	0.4237
Bartlett	0.0205	1	.	0.8861
F Test 2-sided	1.0924	11	11	0.8861

Exhibit A6c.

Oneway Analysis of Measurement (ppm) By Instrument Type of Measurement=Raw, Bottle ID=2ppm, Anion=Formate



Means and Std Deviations

Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
M-13	12	2.00750	0.020505	0.00592	1.9945	2.0205
M-14	12	2.01583	0.031467	0.00908	1.9958	2.0358

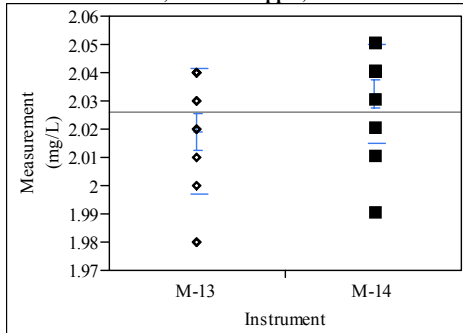
Tests that the Variances are Equal

Level	Count	Std Dev	MeanAbsDif to Mean	MeanAbsDif to Median
M-13	12	0.0205050	0.0145833	0.0141667
M-14	12	0.0314667	0.0258333	0.0258333

Test	F Ratio	DFNum	DFDen	p-Value
O'Brien[.5]	2.7213	1	22	0.1132
Brown-Forsythe	3.4662	1	22	0.0760
Levene	3.3707	1	22	0.0799
Bartlett	1.8735	1	.	0.1711
F Test 2-sided	2.3550	11	11	0.1711

Exhibit A6b.

Oneway Analysis of Measurement (ppm) By Instrument Type of Measurement=Raw, Bottle ID=2ppm, Anion=Fluoride



Means and Std Deviations

Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
M-13	12	2.01917	0.022344	0.00645	2.0050	2.0334
M-14	12	2.03250	0.017645	0.00509	2.0213	2.0437

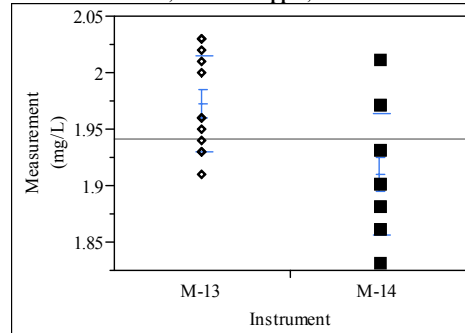
Tests that the Variances are Equal

Level	Count	Std Dev	MeanAbsDif to Mean	MeanAbsDif to Median
M-13	12	0.0223437	0.0177778	0.0175000
M-14	12	0.0176455	0.0133333	0.0108333

Test	F Ratio	DFNum	DFDen	p-Value
O'Brien[.5]	0.6031	1	22	0.4457
Brown-Forsythe	1.1932	1	22	0.2865
Levene	0.8718	1	22	0.3606
Bartlett	0.5810	1	.	0.4459
F Test 2-sided	1.6034	11	11	0.4461

Exhibit A6d.

Oneway Analysis of Measurement (ppm) By Instrument Type of Measurement=Raw, Bottle ID=2ppm, Anion=Nitrate



Means and Std Deviations

Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
M-13	12	1.97250	0.043091	0.01244	1.9451	1.9999
M-14	12	1.91000	0.053428	0.01542	1.8761	1.9439

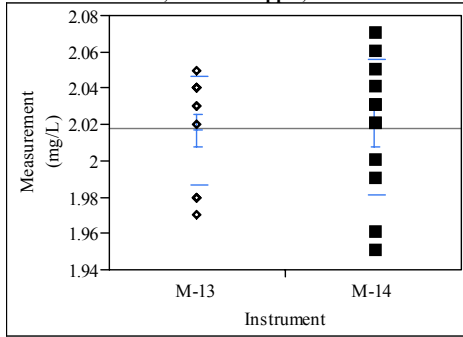
Tests that the Variances are Equal

Level	Count	Std Dev	MeanAbsDif to Mean	MeanAbsDif to Median
M-13	12	0.0430908	0.0379167	0.0358333
M-14	12	0.0534279	0.0433333	0.0416667

Test	F Ratio	DFNum	DFDen	p-Value
O'Brien[.5]	0.8551	1	22	0.3651
Brown-Forsythe	0.2407	1	22	0.6285
Levene	0.3217	1	22	0.5763
Bartlett	0.4828	1	.	0.4872
F Test 2-sided	1.5373	11	11	0.4873

Exhibit A6e.

Oneway Analysis of Measurement (ppm) By Instrument Type of Measurement=Raw, Bottle ID=2ppm, Anion=Nitrite



Means and Std Deviations

Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
M-13	12	2.01667	0.029949	0.00865	1.9976	2.0357
M-14	12	2.01833	0.037376	0.01079	1.9946	2.0421

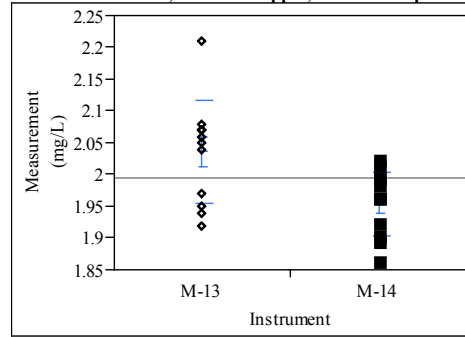
Tests that the Variances are Equal

Level	Count	Std Dev	MeanAbsDif to Mean	MeanAbsDif to Median
M-13	12	0.0299495	0.0261111	0.0233333
M-14	12	0.0373761	0.0288889	0.0283333

Test	F Ratio	DFNum	DFDen	p-Value
O'Brien[.5]	0.8273	1	22	0.3729
Brown-Forsythe	0.2812	1	22	0.6012
Levene	0.1447	1	22	0.7073
Bartlett	0.5121	1	.	0.4742
F Test 2-sided	1.5574	11	11	0.4744

Exhibit A6g.

Oneway Analysis of Measurement (ppm) By Instrument Type of Measurement=Raw, Bottle ID=2ppm, Anion=Phosphate



Means and Std Deviations

Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
M-13	12	2.03583	0.080279	0.02317	1.9848	2.0868
M-14	12	1.95333	0.050332	0.01453	1.9214	1.9853

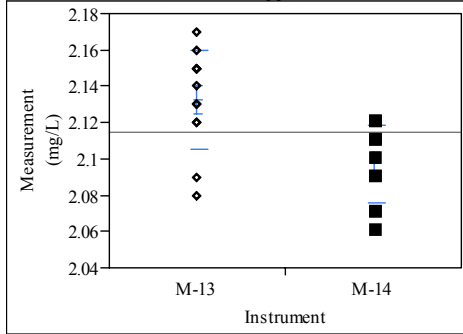
Tests that the Variances are Equal

Level	Count	Std Dev	MeanAbsDif to Mean	MeanAbsDif to Median
M-13	12	0.0802789	0.0605556	0.0575000
M-14	12	0.0503322	0.0405556	0.0383333

Test	F Ratio	DFNum	DFDen	p-Value
O'Brien[.5]	1.6769	1	22	0.2088
Brown-Forsythe	1.0453	1	22	0.3177
Levene	1.5078	1	22	0.2324
Bartlett	2.2145	1	.	0.1367
F Test 2-sided	2.5440	11	11	0.1367

Exhibit A6f.

Oneway Analysis of Measurement (ppm) By Instrument Type of Measurement=Raw, Bottle ID=2ppm, Anion=Oxalate



Means and Std Deviations

Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
M-13	12	2.13250	0.027010	0.00780	2.1153	2.1497
M-14	12	2.09750	0.021373	0.00617	2.0839	2.1111

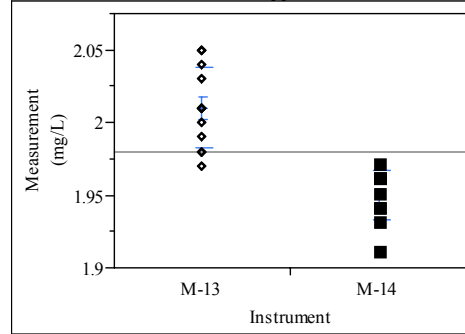
Tests that the Variances are Equal

Level	Count	Std Dev	MeanAbsDif to Mean	MeanAbsDif to Median
M-13	12	0.0270101	0.0208333	0.0208333
M-14	12	0.0213733	0.0179167	0.0175000

Test	F Ratio	DFNum	DFDen	p-Value
O'Brien[.5]	0.7307	1	22	0.4019
Brown-Forsythe	0.2983	1	22	0.5904
Levene	0.2815	1	22	0.6011
Bartlett	0.5713	1	.	0.4498
F Test 2-sided	1.5970	11	11	0.4499

Exhibit A6h.

Oneway Analysis of Measurement (ppm) By Instrument Type of Measurement=Raw, Bottle ID=2ppm, Anion=Sulfate



Means and Std Deviations

Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
M-13	12	2.01000	0.027634	0.00798	1.9924	2.0276
M-14	12	1.95000	0.017056	0.00492	1.9392	1.9608

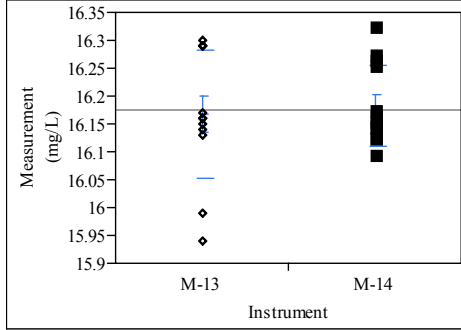
Tests that the Variances are Equal

Level	Count	Std Dev	MeanAbsDif to Mean	MeanAbsDif to Median
M-13	12	0.0276340	0.0216667	0.0216667
M-14	12	0.0170561	0.0133333	0.0116667

Test	F Ratio	DFNum	DFDen	p-Value
O'Brien[.5]	3.3723	1	22	0.0799
Brown-Forsythe	2.3855	1	22	0.1367
Levene	2.3913	1	22	0.1363
Bartlett	2.3604	1	.	0.1245
F Test 2-sided	2.6250	11	11	0.1245

Exhibit A7a.

Oneway Analysis of Measurement (ppm) By Instrument Type of Measurement=Raw, Bottle ID=16ppm, Anion=Chloride



Means and Std Deviations

Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
M-13	12	16.1675	0.116160	0.03353	16.094	16.241
M-14	12	16.1825	0.073128	0.02111	16.136	16.229

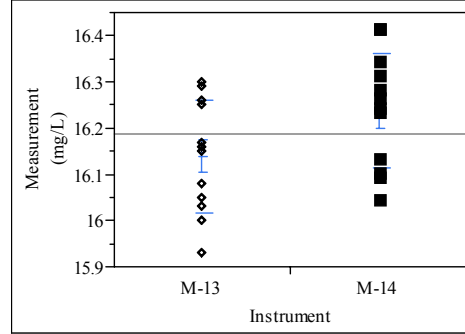
Tests that the Variances are Equal

Level	Count	Std Dev	MeanAbsDif to Mean	MeanAbsDif to Median
M-13	12	0.1161602	0.0837500	0.0825000
M-14	12	0.0731282	0.0616667	0.0558333

Test	F Ratio	DFNum	DFDen	p-Value
O'Brien[.5]	2.1407	1	22	0.1576
Brown-Forsythe	0.9586	1	22	0.3382
Levene	0.8312	1	22	0.3718
Bartlett	2.1771	1	.	0.1401
F Test 2-sided	2.5232	11	11	0.1401

Exhibit A7c.

Oneway Analysis of Measurement (ppm) By Instrument Type of Measurement=Raw, Bottle ID=16ppm, Anion=Formate



Means and Std Deviations

Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
M-13	12	16.1392	0.121913	0.03519	16.062	16.217
M-14	12	16.2367	0.123901	0.03577	16.158	16.315

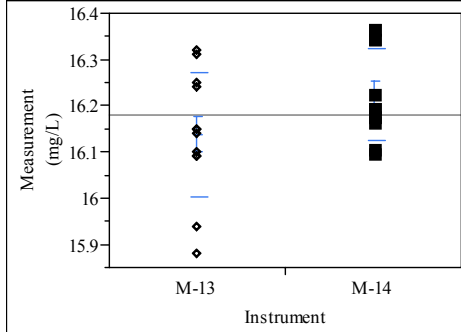
Tests that the Variances are Equal

Level	Count	Std Dev	MeanAbsDif to Mean	MeanAbsDif to Median
M-13	12	0.1219134	0.1009722	0.0991667
M-14	12	0.1239012	0.0988889	0.0983333

Test	F Ratio	DFNum	DFDen	p-Value
O'Brien[.5]	0.0062	1	22	0.9377
Brown-Forsythe	0.0009	1	22	0.9765
Levene	0.0062	1	22	0.9380
Bartlett	0.0028	1	.	0.9582
F Test 2-sided	1.0329	11	11	0.9582

Exhibit A7b.

Oneway Analysis of Measurement (ppm) By Instrument Type of Measurement=Raw, Bottle ID=16ppm, Anion=Fluoride



Means and Std Deviations

Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
M-13	12	16.1383	0.134085	0.03871	16.053	16.224
M-14	12	16.2242	0.099769	0.02880	16.161	16.288

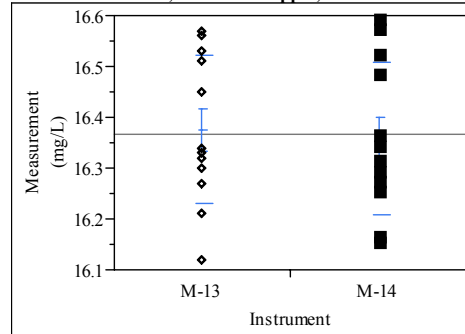
Tests that the Variances are Equal

Level	Count	Std Dev	MeanAbsDif to Mean	MeanAbsDif to Median
M-13	12	0.1340850	0.0986111	0.0983333
M-14	12	0.0997687	0.0838889	0.0775000

Test	F Ratio	DFNum	DFDen	p-Value
O'Brien[.5]	1.1538	1	22	0.2944
Brown-Forsythe	0.4285	1	22	0.5195
Levene	0.2696	1	22	0.6088
Bartlett	0.9064	1	.	0.3411
F Test 2-sided	1.8062	11	11	0.3412

Exhibit A7d.

Oneway Analysis of Measurement (ppm) By Instrument Type of Measurement=Raw, Bottle ID=16ppm, Anion=Nitrate



Means and Std Deviations

Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
M-13	12	16.3758	0.146254	0.04222	16.283	16.469
M-14	12	16.3575	0.150461	0.04343	16.262	16.453

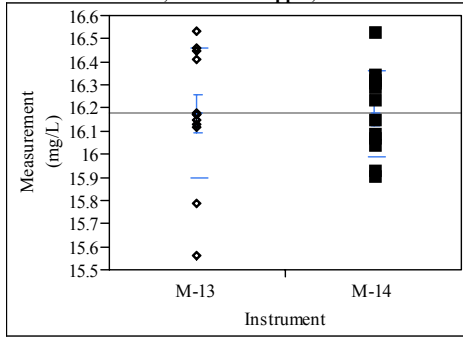
Tests that the Variances are Equal

Level	Count	Std Dev	MeanAbsDif to Mean	MeanAbsDif to Median
M-13	12	0.1462537	0.1234722	0.1175000
M-14	12	0.1504614	0.1220833	0.1191667

Test	F Ratio	DFNum	DFDen	p-Value
O'Brien[.5]	0.0187	1	22	0.8926
Brown-Forsythe	0.0020	1	22	0.9645
Levene	0.0021	1	22	0.9640
Bartlett	0.0085	1	.	0.9267
F Test 2-sided	1.0584	11	11	0.9267

Exhibit A7e.

Oneway Analysis of Measurement (ppm) By Instrument Type of Measurement=Raw, Bottle ID=16ppm, Anion=Nitrite



Means and Std Deviations

Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
M-13	12	16.1767	0.281274	0.08120	15.998	16.355
M-14	12	16.1758	0.185691	0.05360	16.058	16.294

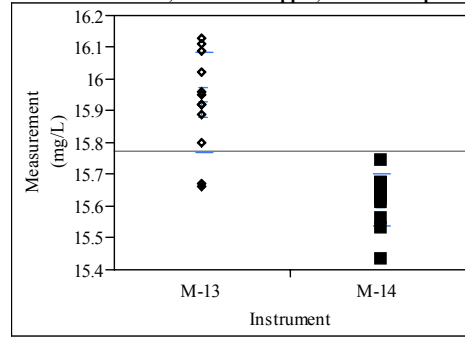
Tests that the Variances are Equal

Level	Count	Std Dev	MeanAbsDif to Mean	MeanAbsDif to Median
M-13	12	0.2812742	0.1911111	0.1900000
M-14	12	0.1856908	0.1541667	0.1541667

Test	F Ratio	DFNum	DFDen	p-Value
O'Brien[.5]	1.3479	1	22	0.2581
Brown-Forsythe	0.3182	1	22	0.5784
Levene	0.3425	1	22	0.5644
Bartlett	1.7644	1	.	0.1841
F Test 2-sided	2.2945	11	11	0.1841

Exhibit A7g.

Oneway Analysis of Measurement (ppm) By Instrument Type of Measurement=Raw, Bottle ID=16ppm, Anion=Phosphate



Means and Std Deviations

Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
M-13	12	15.9267	0.155641	0.04493	15.828	16.026
M-14	12	15.6199	0.081198	0.02344	15.568	15.671

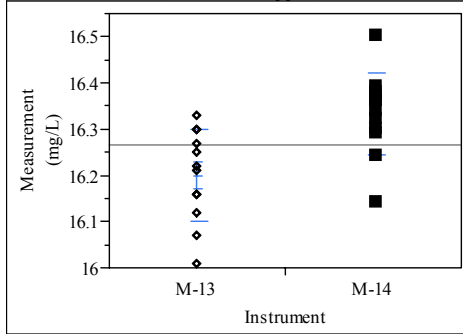
Tests that the Variances are Equal

Level	Count	Std Dev	MeanAbsDif to Mean	MeanAbsDif to Median
M-13	12	0.1556414	0.1166667	0.1166667
M-14	12	0.0811984	0.0584667	0.0567667

Test	F Ratio	DFNum	DFDen	p-Value
O'Brien[.5]	3.6626	1	22	0.0687
Brown-Forsythe	3.3197	1	22	0.0821
Levene	3.3209	1	22	0.0820
Bartlett	4.1716	1	.	0.0411
F Test 2-sided	3.6741	11	11	0.0410

Exhibit A7f.

Oneway Analysis of Measurement (ppm) By Instrument Type of Measurement=Raw, Bottle ID=16ppm, Anion=Oxalate



Means and Std Deviations

Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
M-13	12	16.2000	0.098811	0.02852	16.137	16.263
M-14	12	16.3325	0.088021	0.02541	16.277	16.388

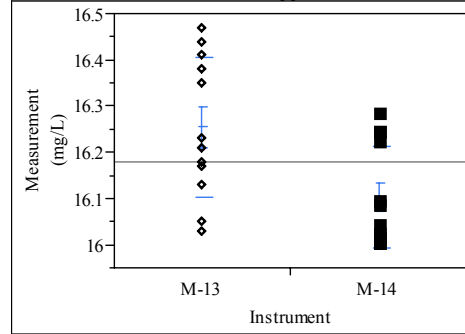
Tests that the Variances are Equal

Level	Count	Std Dev	MeanAbsDif to Mean	MeanAbsDif to Median
M-13	12	0.0988111	0.0800000	0.0783333
M-14	12	0.0880212	0.0620833	0.0608333

Test	F Ratio	DFNum	DFDen	p-Value
O'Brien[.5]	0.1439	1	22	0.7081
Brown-Forsythe	0.4993	1	22	0.4872
Levene	0.6090	1	22	0.4435
Bartlett	0.1404	1	.	0.7079
F Test 2-sided	1.2602	11	11	0.7080

Exhibit A7h.

Oneway Analysis of Measurement (ppm) By Instrument Type of Measurement=Raw, Bottle ID=16ppm, Anion=Sulfate



Means and Std Deviations

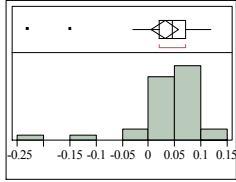
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
M-13	12	16.2542	0.151625	0.04377	16.158	16.351
M-14	12	16.1025	0.109804	0.03170	16.033	16.172

Tests that the Variances are Equal

Level	Count	Std Dev	MeanAbsDif to Mean	MeanAbsDif to Median
M-13	12	0.1516250	0.1298611	0.1258333
M-14	12	0.1098035	0.0950000	0.0891667

Test	F Ratio	DFNum	DFDen	p-Value
O'Brien[.5]	2.7305	1	22	0.1126
Brown-Forsythe	1.3070	1	22	0.2652
Levene	2.1432	1	22	0.1573
Bartlett	1.0773	1	.	0.2993
F Test 2-sided	1.9068	11	11	0.2994

Exhibit A8a.
Distributions Anion=Chloride
Raw Score Difference (ppm)
(M13-M14)



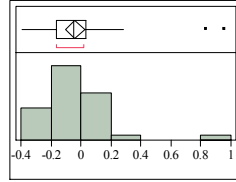
Quantiles

100.0%	maximum	0.1200
99.5%		0.1200
97.5%		0.1200
90.0%		0.0900
75.0%	quartile	0.0700
50.0%	median	0.0450
25.0%	quartile	0.0200
10.0%		-0.0290
2.5%		-0.2300
0.5%		-0.2300
0.0%	minimum	-0.2300

Moments

Mean	0.0316667
Std Dev	0.0702745
Std Err Mean	0.0128303
upper 95% Mean	0.0579076
lower 95% Mean	0.0054257
N	30

Exhibit A8c.
Distributions Anion=Formate
Raw Score Difference (ppm)
(M13-M14)



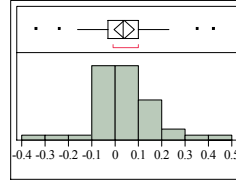
Quantiles

100.0%	maximum	0.9500
99.5%		0.9500
97.5%		0.8990
90.0%		0.1630
75.0%	quartile	0.0300
50.0%	median	-0.0500
25.0%	quartile	-0.1600
10.0%		-0.3360
2.5%		-0.3815
0.5%		-0.3900
0.0%	minimum	-0.3900

Moments

Mean	-0.040893
Std Dev	0.2398581
Std Err Mean	0.0320524
upper 95% Mean	0.0233416
lower 95% Mean	-0.105127
N	56

Exhibit A8e.
Distributions Anion=Nitrite
Raw Score Difference (ppm)
(M13-M14)



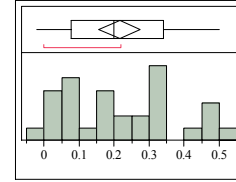
Quantiles

100.0%	maximum	0.4200
99.5%		0.4200
97.5%		0.4183
90.0%		0.2240
75.0%	quartile	0.1000
50.0%	median	0.0350
25.0%	quartile	-0.0300
10.0%		-0.0960
2.5%		-0.3375
0.5%		-0.3400
0.0%	minimum	-0.3400

Moments

Mean	0.04025
Std Dev	0.1365601
Std Err Mean	0.021592
upper 95% Mean	0.083924
lower 95% Mean	-0.003424
N	40

Exhibit A8g.
Distributions Anion=Phosphate
Raw Score Difference (ppm)
(M13-M14)



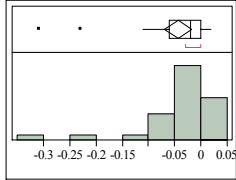
Quantiles

100.0%	maximum	0.5000
99.5%		0.5000
97.5%		0.5000
90.0%		0.4860
75.0%	quartile	0.3400
50.0%	median	0.2000
25.0%	quartile	0.0775
10.0%		0.0010
2.5%		-0.0200
0.5%		-0.0200
0.0%	minimum	-0.0200

Moments

Mean	0.2153733
Std Dev	0.1615621
Std Err Mean	0.0294971
upper 95% Mean	0.2757016
lower 95% Mean	0.1550451
N	30

Exhibit A8b.
Distributions Anion=Fluoride
Raw Score Difference (ppm)
(M13-M14)



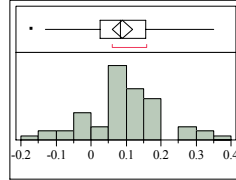
Quantiles

100.0%	maximum	0.0200
99.5%		0.0200
97.5%		0.0200
90.0%		0.0000
75.0%	quartile	0.0000
50.0%	median	-0.0200
25.0%	quartile	-0.0600
10.0%		-0.1090
2.5%		-0.3100
0.5%		-0.3100
0.0%	minimum	-0.3100

Moments

Mean	-0.043333
Std Dev	0.0698932
Std Err Mean	0.0127607
upper 95% Mean	-0.017235
lower 95% Mean	-0.069432
N	30

Exhibit A8d.
Distributions Anion=Nitrate
Raw Score Difference (ppm)
(M13-M14)



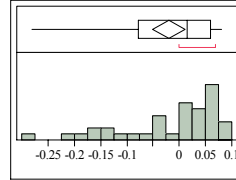
Quantiles

100.0%	maximum	0.3500
99.5%		0.3500
97.5%		0.3372
90.0%		0.2530
75.0%	quartile	0.1575
50.0%	median	0.0850
25.0%	quartile	0.0275
10.0%		-0.0460
2.5%		-0.1530
0.5%		-0.1700
0.0%	minimum	-0.1700

Moments

Mean	0.0891071
Std Dev	0.1068266
Std Err Mean	0.0142753
upper 95% Mean	0.1177155
lower 95% Mean	0.0604988
N	56

Exhibit A8f.
Distributions Anion=Oxalate
Raw Score Difference (ppm)
(M13-M14)



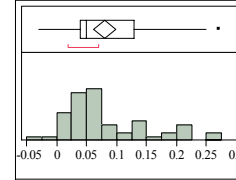
Quantiles

100.0%	maximum	0.0800
99.5%		0.0800
97.5%		0.0800
90.0%		0.0710
75.0%	quartile	0.0600
50.0%	median	0.0150
25.0%	quartile	-0.0775
10.0%		-0.1730
2.5%		-0.2800
0.5%		-0.2800
0.0%	minimum	-0.2800

Moments

Mean	-0.019737
Std Dev	0.0957894
Std Err Mean	0.0155391
upper 95% Mean	0.0117483
lower 95% Mean	-0.051222
N	38

Exhibit A8h.
Distributions Anion=Sulfate
Raw Score Difference (ppm)
(M13-M14)



Quantiles

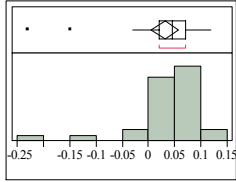
100.0%	maximum	0.2700
99.5%		0.2700
97.5%		0.2625
90.0%		0.2000
75.0%	quartile	0.1300
50.0%	median	0.0500
25.0%	quartile	0.0400
10.0%		0.0100
2.5%		-0.0225
0.5%		-0.0300
0.0%	minimum	-0.0300

Moments

Mean	0.0801852
Std Dev	0.0689679
Std Err Mean	0.0093853
upper 95% Mean	0.0990098
lower 95% Mean	0.0613606
N	54

Exhibit A8i.

Distributions Anion=Chloride,
Type of Sample=standard
Raw Score Difference (ppm)
(M13-M14)



Quantiles

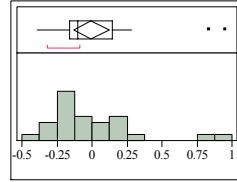
100.0%	maximum	0.1200
99.5%		0.1200
97.5%		0.1200
90.0%		0.0900
75.0%	quartile	0.0700
50.0%	median	0.0450
25.0%	quartile	0.0200
10.0%		-0.0290
2.5%		-0.2300
0.5%		-0.2300
0.0%	minimum	-0.2300

Moments

Mean	0.0316667
Std Dev	0.0702745
Std Err Mean	0.0128303
upper 95% Mean	0.0579076
lower 95% Mean	0.0054257
N	30

Exhibit A8k.

Distributions Anion=Formate,
Type of Sample=process
Raw Score Difference (ppm)
(M13-M14)



Quantiles

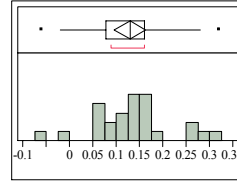
100.0%	maximum	0.9500
99.5%		0.9500
97.5%		0.9500
90.0%		0.4450
75.0%	quartile	0.1425
50.0%	median	-0.1000
25.0%	quartile	-0.1625
10.0%		-0.3350
2.5%		-0.3900
0.5%		-0.3900
0.0%	minimum	-0.3900

Moments

Mean	-0.004231
Std Dev	0.3173915
Std Err Mean	0.0622456
upper 95% Mean	0.1239664
lower 95% Mean	-0.132428
N	26

Exhibit A8m.

Distributions Anion=Nitrate, Type
of Sample=process
Raw Score Difference (ppm)
(M13-M14)



Quantiles

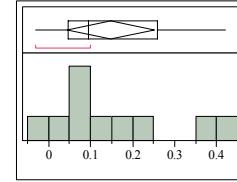
100.0%	maximum	0.3200
99.5%		0.3200
97.5%		0.3200
90.0%		0.2660
75.0%	quartile	0.1600
50.0%	median	0.1300
25.0%	quartile	0.0775
10.0%		0.0290
2.5%		-0.0600
0.5%		-0.0600
0.0%	minimum	-0.0600

Moments

Mean	0.1296154
Std Dev	0.0851108
Std Err Mean	0.0166916
upper 95% Mean	0.1639924
lower 95% Mean	0.0952384
N	26

Exhibit A8o.

Distributions Anion=Nitrite, Type
of Sample=process
Raw Score Difference (ppm)
(M13-M14)



Quantiles

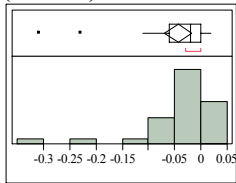
100.0%	maximum	0.4200
99.5%		0.4200
97.5%		0.4200
90.0%		0.4130
75.0%	quartile	0.2600
50.0%	median	0.0950
25.0%	quartile	0.0475
10.0%		-0.0260
2.5%		-0.0300
0.5%		-0.0300
0.0%	minimum	-0.0300

Moments

Mean	0.148
Std Dev	0.1455869
Std Err Mean	0.0460386
upper 95% Mean	0.2521466
lower 95% Mean	0.0438534
N	10

Exhibit A8j.

Distributions Anion=Fluoride,
Type of Sample=standard
Raw Score Difference (ppm)
(M13-M14)



Quantiles

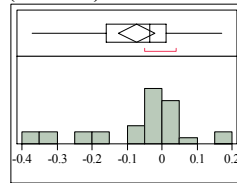
100.0%	maximum	0.0200
99.5%		0.0200
97.5%		0.0200
90.0%		0.0000
75.0%	quartile	0.0000
50.0%	median	-0.0200
25.0%	quartile	-0.0600
10.0%		-0.1090
2.5%		-0.3100
0.5%		-0.3100
0.0%	minimum	-0.3100

Moments

Mean	-0.043333
Std Dev	0.0698932
Std Err Mean	0.0127607
upper 95% Mean	-0.017235
lower 95% Mean	-0.069432
N	30

Exhibit A8l.

Distributions Anion=Formate,
Type of Sample=standard
Raw Score Difference (ppm)
(M13-M14)



Quantiles

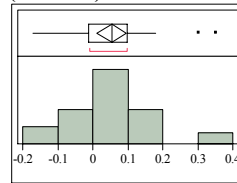
100.0%	maximum	0.1700
99.5%		0.1700
97.5%		0.1700
90.0%		0.0670
75.0%	quartile	0.0125
50.0%	median	-0.0350
25.0%	quartile	-0.1600
10.0%		-0.3480
2.5%		-0.3700
0.5%		-0.3700
0.0%	minimum	-0.3700

Moments

Mean	-0.072667
Std Dev	0.1414929
Std Err Mean	0.0258329
upper 95% Mean	-0.019832
lower 95% Mean	-0.125501
N	30

Exhibit A8n.

Distributions Anion=Nitrate, Type
of Sample=standard
Raw Score Difference (ppm)
(M13-M14)



Quantiles

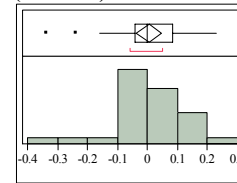
100.0%	maximum	0.3500
99.5%		0.3500
97.5%		0.3500
90.0%		0.1800
75.0%	quartile	0.1000
50.0%	median	0.0550
25.0%	quartile	-0.0125
10.0%		-0.1050
2.5%		-0.1700
0.5%		-0.1700
0.0%	minimum	-0.1700

Moments

Mean	0.054
Std Dev	0.1124829
Std Err Mean	0.0205365
upper 95% Mean	0.0960018
lower 95% Mean	0.0119982
N	30

Exhibit A8p.

Distributions Anion=Nitrite, Type
of Sample=standard
Raw Score Difference (ppm)
(M13-M14)



Quantiles

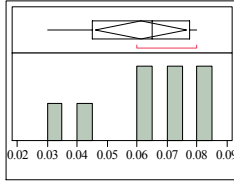
100.0%	maximum	0.2300
99.5%		0.2300
97.5%		0.2300
90.0%		0.1460
75.0%	quartile	0.0825
50.0%	median	0.0000
25.0%	quartile	-0.0425
10.0%		-0.1540
2.5%		-0.3400
0.5%		-0.3400
0.0%	minimum	-0.3400

Moments

Mean	0.0043333
Std Dev	0.1147316
Std Err Mean	0.020947
upper 95% Mean	0.0471748
lower 95% Mean	-0.038508
N	30

Exhibit A8q.

Distributions Anion=Oxalate, Type of Sample=process
Raw Score Difference (ppm)
(M13-M14)



Quantiles

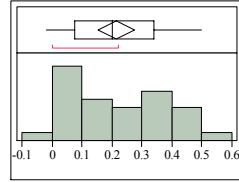
100.0%	maximum	0.08000
99.5%		0.08000
97.5%		0.08000
90.0%		0.08000
75.0%	quartile	0.07750
50.0%	median	0.06500
25.0%	quartile	0.04500
10.0%		0.03000
2.5%		0.03000
0.5%		0.03000
0.0%	minimum	0.03000

Moments

Mean	0.06125
Std Dev	0.0180772
Std Err Mean	0.0063913
upper 95% Mean	0.0763629
lower 95% Mean	0.0461371
N	8

Exhibit A8s.

Distributions Anion=Phosphate, Type of Sample=standard
Raw Score Difference (ppm)
(M13-M14)



Quantiles

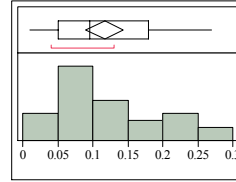
100.0%	maximum	0.5000
99.5%		0.5000
97.5%		0.5000
90.0%		0.4860
75.0%	quartile	0.3400
50.0%	median	0.2000
25.0%	quartile	0.0775
10.0%		0.0010
2.5%		-0.0200
0.5%		-0.0200
0.0%	minimum	-0.0200

Moments

Mean	0.2153733
Std Dev	0.1615621
Std Err Mean	0.0294971
upper 95% Mean	0.2757016
lower 95% Mean	0.1550451
N	30

Exhibit A8u.

Distributions Anion=Sulfate, Type of Sample=standard
Raw Score Difference (ppm)
(M13-M14)



Quantiles

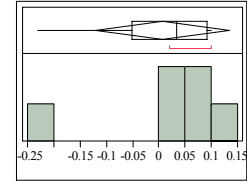
100.0%	maximum	0.27000
99.5%		0.27000
97.5%		0.27000
90.0%		0.21900
75.0%	quartile	0.18000
50.0%	median	0.09500
25.0%	quartile	0.05000
10.0%		0.04000
2.5%		0.01000
0.5%		0.01000
0.0%	minimum	0.01000

Moments

Mean	0.1166667
Std Dev	0.0709217
Std Err Mean	0.0129485
upper 95% Mean	0.1431493
lower 95% Mean	0.0901841
N	30

Exhibit A8w.

Distributions Anion=Chloride, Type of Sample=standard,
Tank=SRAT Product
Raw Score Difference (ppm)
(M13-M14)



Quantiles

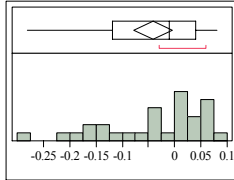
100.0%	maximum	0.1000
99.5%		0.1000
97.5%		0.1000
90.0%		0.1000
75.0%	quartile	0.0925
50.0%	median	0.0350
25.0%	quartile	-0.0500
10.0%		-0.2300
2.5%		-0.2300
0.5%		-0.2300
0.0%	minimum	-0.2300

Moments

Mean	0.0066667
Std Dev	0.1214359
Std Err Mean	0.049576
upper 95% Mean	0.1341058
lower 95% Mean	-0.120772
N	6

Exhibit A8r.

Distributions Anion=Oxalate, Type of Sample=standard
Raw Score Difference (ppm)
(M13-M14)



Quantiles

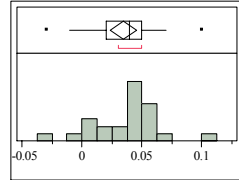
100.0%	maximum	0.0800
99.5%		0.0800
97.5%		0.0800
90.0%		0.0600
75.0%	quartile	0.0400
50.0%	median	-0.0100
25.0%	quartile	-0.1175
10.0%		-0.1970
2.5%		-0.2800
0.5%		-0.2800
0.0%	minimum	-0.2800

Moments

Mean	-0.041333
Std Dev	0.0966235
Std Err Mean	0.0176409
upper 95% Mean	-0.005254
lower 95% Mean	-0.077413
N	30

Exhibit A8t.

Distributions Anion=Sulfate, Type of Sample=process
Raw Score Difference (ppm)
(M13-M14)



Quantiles

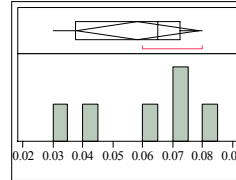
100.0%	maximum	0.1000
99.5%		0.1000
97.5%		0.1000
90.0%		0.0650
75.0%	quartile	0.0500
50.0%	median	0.0400
25.0%	quartile	0.0200
10.0%		-0.0050
2.5%		-0.0300
0.5%		-0.0300
0.0%	minimum	-0.0300

Moments

Mean	0.0345833
Std Dev	0.0266995
Std Err Mean	0.00545
upper 95% Mean	0.0458575
lower 95% Mean	0.0233091
N	24

Exhibit A8v.

Distributions Anion=Chloride, Type of Sample=standard,
Tank=SME
Raw Score Difference (ppm)
(M13-M14)



Quantiles

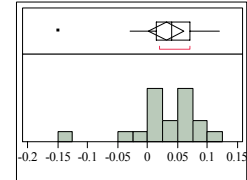
100.0%	maximum	0.08000
99.5%		0.08000
97.5%		0.08000
90.0%		0.08000
75.0%	quartile	0.07250
50.0%	median	0.06500
25.0%	quartile	0.03750
10.0%		0.03000
2.5%		0.03000
0.5%		0.03000
0.0%	minimum	0.03000

Moments

Mean	0.0583333
Std Dev	0.0194079
Std Err Mean	0.0079232
upper 95% Mean	0.0787007
lower 95% Mean	0.037966
N	6

Exhibit A8x.

Distributions Anion=Chloride, Type of Sample=standard,
Tank=SRAT Receipt
Raw Score Difference (ppm)
(M13-M14)



Quantiles

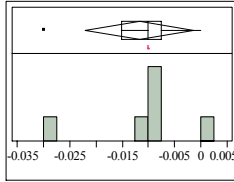
100.0%	maximum	0.1200
99.5%		0.1200
97.5%		0.1200
90.0%		0.0930
75.0%	quartile	0.0700
50.0%	median	0.0400
25.0%	quartile	0.0150
10.0%		-0.0420
2.5%		-0.1500
0.5%		-0.1500
0.0%	minimum	-0.1500

Moments

Mean	0.0311111
Std Dev	0.0591995
Std Err Mean	0.0139534
upper 95% Mean	0.0605503
lower 95% Mean	0.0016719
N	18

Exhibit A8y.

Distributions Anion=Fluoride,
Type of Sample=standard,
Tank=SME
Raw Score Difference (ppm)
(M13-M14)



Quantiles

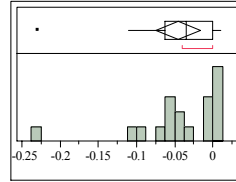
100.0%	maximum	0.0000
99.5%		0.0000
97.5%		0.0000
90.0%		0.0000
75.0%	quartile	-0.0075
50.0%	median	-0.0100
25.0%	quartile	-0.0150
10.0%		-0.0300
2.5%		-0.0300
0.5%		-0.0300
0.0%	minimum	-0.0300

Moments

Mean	-0.011667
Std Dev	0.0098319
Std Err Mean	0.0040139
upper 95% Mean	-0.001349
lower 95% Mean	-0.021985
N	6

Exhibit A8aa.

Distributions Anion=Fluoride,
Type of Sample=standard,
Tank=SRAT Receipt
Raw Score Difference (ppm)
(M13-M14)



Quantiles

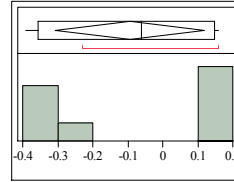
100.0%	maximum	0.0100
99.5%		0.0100
97.5%		0.0100
90.0%		0.0010
75.0%	quartile	0.0000
50.0%	median	-0.0350
25.0%	quartile	-0.0625
10.0%		-0.1220
2.5%		-0.2300
0.5%		-0.2300
0.0%	minimum	-0.2300

Moments

Mean	-0.045556
Std Dev	0.0583319
Std Err Mean	0.013749
upper 95% Mean	-0.016548
lower 95% Mean	-0.074563
N	18

Exhibit A8ac.

Distributions Anion=Formate,
Type of Sample=process,
Tank=SRAT Product
Raw Score Difference (ppm)
(M13-M14)



Quantiles

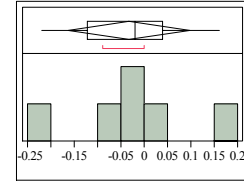
100.0%	maximum	0.1600
99.5%		0.1600
97.5%		0.1600
90.0%		0.1600
75.0%	quartile	0.1475
50.0%	median	-0.0600
25.0%	quartile	-0.3575
10.0%		-0.3900
2.5%		-0.3900
0.5%		-0.3900
0.0%	minimum	-0.3900

Moments

Mean	-0.09375
Std Dev	0.254611
Std Err Mean	0.0900186
upper 95% Mean	0.1191102
lower 95% Mean	-0.30661
N	8

Exhibit A8ac.

Distributions Anion=Formate,
Type of Sample=standard,
Tank=SME
Raw Score Difference (ppm)
(M13-M14)



Quantiles

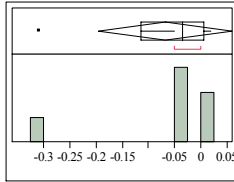
100.0%	maximum	0.1600
99.5%		0.1600
97.5%		0.1600
90.0%		0.1600
75.0%	quartile	0.0400
50.0%	median	-0.0200
25.0%	quartile	-0.1225
10.0%		-0.2200
2.5%		-0.2200
0.5%		-0.2200
0.0%	minimum	-0.2200

Moments

Mean	-0.031667
Std Dev	0.1241639
Std Err Mean	0.0506897
upper 95% Mean	0.0986353
lower 95% Mean	-0.161969
N	6

Exhibit A8z.

Distributions Anion=Fluoride,
Type of Sample=standard,
Tank=SRAT Product
Raw Score Difference (ppm)
(M13-M14)



Quantiles

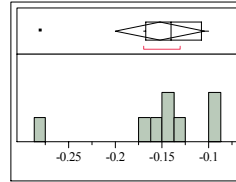
100.0%	maximum	0.0200
99.5%		0.0200
97.5%		0.0200
90.0%		0.0200
75.0%	quartile	0.0050
50.0%	median	-0.0350
25.0%	quartile	-0.1150
10.0%		-0.3100
2.5%		-0.3100
0.5%		-0.3100
0.0%	minimum	-0.3100

Moments

Mean	-0.068333
Std Dev	0.1212298
Std Err Mean	0.0494919
upper 95% Mean	0.0588895
lower 95% Mean	-0.195556
N	6

Exhibit A8ab.

Distributions Anion=Formate,
Type of Sample=process,
Tank=SME
Raw Score Difference (ppm)
(M13-M14)



Quantiles

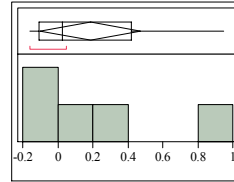
100.0%	maximum	-0.1000
99.5%		-0.1000
97.5%		-0.1000
90.0%		-0.1000
75.0%	quartile	-0.1075
50.0%	median	-0.1400
25.0%	quartile	-0.1675
10.0%		-0.2800
2.5%		-0.2800
0.5%		-0.2800
0.0%	minimum	-0.2800

Moments

Mean	-0.1525
Std Dev	0.0572588
Std Err Mean	0.020244
upper 95% Mean	-0.10463
lower 95% Mean	-0.20037
N	8

Exhibit A8ad.

Distributions Anion=Formate,
Type of Sample=process,
Tank=SRAT Receipt
Raw Score Difference (ppm)
(M13-M14)



Quantiles

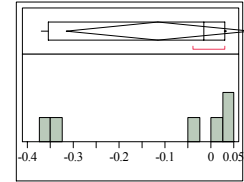
100.0%	maximum	0.9500
99.5%		0.9500
97.5%		0.9500
90.0%		0.9380
75.0%	quartile	0.4175
50.0%	median	0.0250
25.0%	quartile	-0.1075
10.0%		-0.1570
2.5%		-0.1600
0.5%		-0.1600
0.0%	minimum	-0.1600

Moments

Mean	0.186
Std Dev	0.3999778
Std Err Mean	0.1264841
upper 95% Mean	0.4721269
lower 95% Mean	-0.100127
N	10

Exhibit A8af.

Distributions Anion=Formate,
Type of Sample=standard,
Tank=SRAT Product
Raw Score Difference (ppm)
(M13-M14)



Quantiles

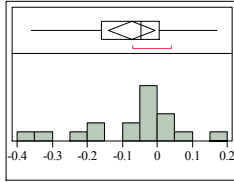
100.0%	maximum	0.0300
99.5%		0.0300
97.5%		0.0300
90.0%		0.0300
75.0%	quartile	0.0300
50.0%	median	-0.0150
25.0%	quartile	-0.3550
10.0%		-0.3700
2.5%		-0.3700
0.5%		-0.3700
0.0%	minimum	-0.3700

Moments

Mean	-0.115
Std Dev	0.1915985
Std Err Mean	0.0782198
upper 95% Mean	0.0860703
lower 95% Mean	-0.31607
N	6

Exhibit A8ag.

Distributions Anion=Formate, Type of Sample=standard, Tank=SRAT Receipt
Raw Score Difference (ppm) (M13-M14)



Quantiles

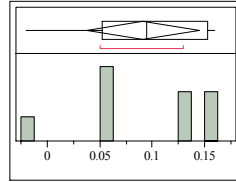
100.0%	maximum	0.1700
99.5%		0.1700
97.5%		0.1700
90.0%		0.0800
75.0%	quartile	0.0050
50.0%	median	-0.0450
25.0%	quartile	-0.1600
10.0%		-0.3330
2.5%		-0.3600
0.5%		-0.3600
0.0%	minimum	-0.3600

Moments

Mean	-0.072222
Std Dev	0.1326453
Std Err Mean	0.0312648
upper 95% Mean	-0.006259
lower 95% Mean	-0.138185
N	18

Exhibit A8ai.

Distributions Anion=Nitrate, Type of Sample=process, Tank=SRAT Product
Raw Score Difference (ppm) (M13-M14)



Quantiles

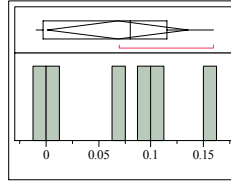
100.0%	maximum	0.1600
99.5%		0.1600
97.5%		0.1600
90.0%		0.1600
75.0%	quartile	0.1525
50.0%	median	0.0950
25.0%	quartile	0.0525
10.0%		-0.0200
2.5%		-0.0200
0.5%		-0.0200
0.0%	minimum	-0.0200

Moments

Mean	0.09125
Std Dev	0.0637938
Std Err Mean	0.0225545
upper 95% Mean	0.1445829
lower 95% Mean	0.0379171
N	8

Exhibit A8ak.

Distributions Anion=Nitrate, Type of Sample=standard, Tank=SME
Raw Score Difference (ppm) (M13-M14)



Quantiles

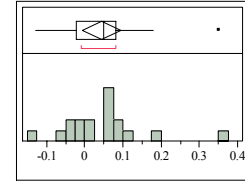
100.0%	maximum	0.1600
99.5%		0.1600
97.5%		0.1600
90.0%		0.1600
75.0%	quartile	0.1150
50.0%	median	0.0800
25.0%	quartile	-0.0025
10.0%		-0.0100
2.5%		-0.0100
0.5%		-0.0100
0.0%	minimum	-0.0100

Moments

Mean	0.0683333
Std Dev	0.0643169
Std Err Mean	0.0262573
upper 95% Mean	0.1358298
lower 95% Mean	0.0008369
N	6

Exhibit A8am.

Distributions Anion=Nitrate, Type of Sample=standard, Tank=SRAT Receipt
Raw Score Difference (ppm) (M13-M14)



Quantiles

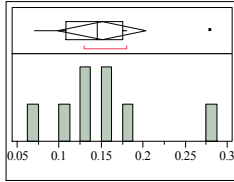
100.0%	maximum	0.3500
99.5%		0.3500
97.5%		0.3500
90.0%		0.1970
75.0%	quartile	0.0800
50.0%	median	0.0500
25.0%	quartile	-0.0225
10.0%		-0.0670
2.5%		-0.1300
0.5%		-0.1300
0.0%	minimum	-0.1300

Moments

Mean	0.0438889
Std Dev	0.1033634
Std Err Mean	0.024363
upper 95% Mean	0.0952903
lower 95% Mean	-0.007513
N	18

Exhibit A8ah.

Distributions Anion=Nitrate, Type of Sample=process, Tank=SME
Raw Score Difference (ppm) (M13-M14)



Quantiles

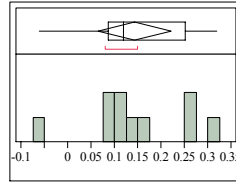
100.0%	maximum	0.28000
99.5%		0.28000
97.5%		0.28000
90.0%		0.28000
75.0%	quartile	0.17500
50.0%	median	0.14500
25.0%	quartile	0.10750
10.0%		0.07000
2.5%		0.07000
0.5%		0.07000
0.0%	minimum	0.07000

Moments

Mean	0.15125
Std Dev	0.0628916
Std Err Mean	0.0222355
upper 95% Mean	0.2038287
lower 95% Mean	0.0986713
N	8

Exhibit A8aj.

Distributions Anion=Nitrate, Type of Sample=process, Tank=SRAT Receipt
Raw Score Difference (ppm) (M13-M14)



Quantiles

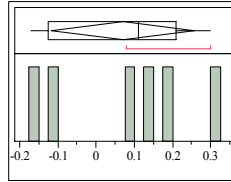
100.0%	maximum	0.3200
99.5%		0.3200
97.5%		0.3200
90.0%		0.3140
75.0%	quartile	0.2525
50.0%	median	0.1200
25.0%	quartile	0.0875
10.0%		-0.0460
2.5%		-0.0600
0.5%		-0.0600
0.0%	minimum	-0.0600

Moments

Mean	0.143
Std Dev	0.1093465
Std Err Mean	0.0345784
upper 95% Mean	0.2212218
lower 95% Mean	0.0647782
N	10

Exhibit A8al.

Distributions Anion=Nitrate, Type of Sample=standard, Tank=SRAT Product
Raw Score Difference (ppm) (M13-M14)



Quantiles

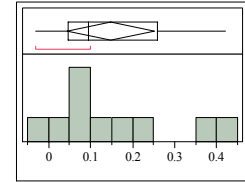
100.0%	maximum	0.3000
99.5%		0.3000
97.5%		0.3000
90.0%		0.3000
75.0%	quartile	0.2100
50.0%	median	0.1100
25.0%	quartile	-0.1250
10.0%		-0.1700
2.5%		-0.1700
0.5%		-0.1700
0.0%	minimum	-0.1700

Moments

Mean	0.07
Std Dev	0.1788854
Std Err Mean	0.0730297
upper 95% Mean	0.2577288
lower 95% Mean	-0.117729
N	6

Exhibit A8an.

Distributions Anion=Nitrite, Type of Sample=process, Tank=SRAT Receipt
Raw Score Difference (ppm) (M13-M14)



Quantiles

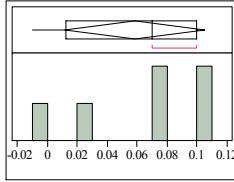
100.0%	maximum	0.4200
99.5%		0.4200
97.5%		0.4200
90.0%		0.4130
75.0%	quartile	0.2600
50.0%	median	0.0950
25.0%	quartile	0.0475
10.0%		-0.0260
2.5%		-0.0300
0.5%		-0.0300
0.0%	minimum	-0.0300

Moments

Mean	0.148
Std Dev	0.1455869
Std Err Mean	0.0460386
upper 95% Mean	0.2521466
lower 95% Mean	0.0438534
N	10

Exhibit A8ao.

Distributions Anion=Nitrite, Type of Sample=standard, Tank=SME
Raw Score Difference (ppm)
(M13-M14)



Quantiles

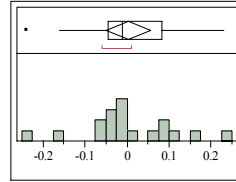
100.0%	maximum	0.1000
99.5%		0.1000
97.5%		0.1000
90.0%		0.1000
75.0%	quartile	0.1000
50.0%	median	0.0700
25.0%	quartile	0.0125
10.0%		-0.0100
2.5%		-0.0100
0.5%		-0.0100
0.0%	minimum	-0.0100

Moments

Mean	0.0583333
Std Dev	0.0444597
Std Err Mean	0.0181506
upper 95% Mean	0.1049909
lower 95% Mean	0.0116757
N	6

Exhibit A8aq.

Distributions Anion=Nitrite, Type of Sample=standard, Tank=SRAT Receipt
Raw Score Difference (ppm)
(M13-M14)



Quantiles

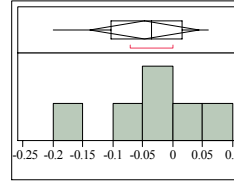
100.0%	maximum	0.2300
99.5%		0.2300
97.5%		0.2300
90.0%		0.1580
75.0%	quartile	0.0825
50.0%	median	-0.0100
25.0%	quartile	-0.0450
10.0%		-0.1680
2.5%		-0.2400
0.5%		-0.2400
0.0%	minimum	-0.2400

Moments

Mean	0.0033333
Std Dev	0.1080849
Std Err Mean	0.0254759
upper 95% Mean	0.0570827
lower 95% Mean	-0.050416
N	18

Exhibit A8as.

Distributions Anion=Oxalate, Type of Sample=standard, Tank=SME
Raw Score Difference (ppm)
(M13-M14)



Quantiles

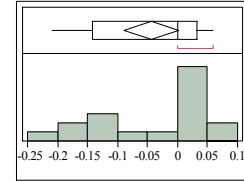
100.0%	maximum	0.0600
99.5%		0.0600
97.5%		0.0600
90.0%		0.0600
75.0%	quartile	0.0150
50.0%	median	-0.0350
25.0%	quartile	-0.1025
10.0%		-0.2000
2.5%		-0.2000
0.5%		-0.2000
0.0%	minimum	-0.2000

Moments

Mean	-0.046667
Std Dev	0.0871015
Std Err Mean	0.035559
upper 95% Mean	0.0447407
lower 95% Mean	-0.138074
N	6

Exhibit A8au.

Distributions Anion=Oxalate, Type of Sample=standard, Tank=SRAT Receipt
Raw Score Difference (ppm)
(M13-M14)



Quantiles

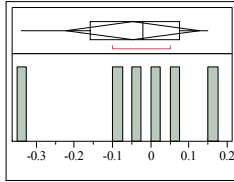
100.0%	maximum	0.0600
99.5%		0.0600
97.5%		0.0600
90.0%		0.0600
75.0%	quartile	0.0325
50.0%	median	0.0000
25.0%	quartile	-0.1425
10.0%		-0.1740
2.5%		-0.2100
0.5%		-0.2100
0.0%	minimum	-0.2100

Moments

Mean	-0.044444
Std Dev	0.0919221
Std Err Mean	0.0216662
upper 95% Mean	0.0012673
lower 95% Mean	-0.090156
N	18

Exhibit A8ap.

Distributions Anion=Nitrite, Type of Sample=standard, Tank=SRAT Product
Raw Score Difference (ppm)
(M13-M14)



Quantiles

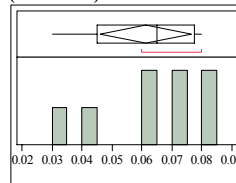
100.0%	maximum	0.1500
99.5%		0.1500
97.5%		0.1500
90.0%		0.1500
75.0%	quartile	0.0750
50.0%	median	-0.0200
25.0%	quartile	-0.1600
10.0%		-0.3400
2.5%		-0.3400
0.5%		-0.3400
0.0%	minimum	-0.3400

Moments

Mean	-0.046667
Std Dev	0.1674117
Std Err Mean	0.0683455
upper 95% Mean	0.1290211
lower 95% Mean	-0.222354
N	6

Exhibit A8ar.

Distributions Anion=Oxalate, Type of Sample=process, Tank=SRAT Receipt
Raw Score Difference (ppm)
(M13-M14)



Quantiles

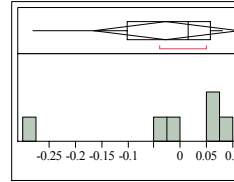
100.0%	maximum	0.08000
99.5%		0.08000
97.5%		0.08000
90.0%		0.08000
75.0%	quartile	0.07750
50.0%	median	0.06500
25.0%	quartile	0.04500
10.0%		0.03000
2.5%		0.03000
0.5%		0.03000
0.0%	minimum	0.03000

Moments

Mean	0.06125
Std Dev	0.0180772
Std Err Mean	0.0063913
upper 95% Mean	0.0763629
lower 95% Mean	0.0461371
N	8

Exhibit A8at.

Distributions Anion=Oxalate, Type of Sample=standard, Tank=SRAT Product
Raw Score Difference (ppm)
(M13-M14)



Quantiles

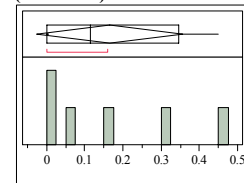
100.0%	maximum	0.0800
99.5%		0.0800
97.5%		0.0800
90.0%		0.0800
75.0%	quartile	0.0575
50.0%	median	0.0150
25.0%	quartile	-0.1000
10.0%		-0.2800
2.5%		-0.2800
0.5%		-0.2800
0.0%	minimum	-0.2800

Moments

Mean	-0.026667
Std Dev	0.1323128
Std Err Mean	0.0540165
upper 95% Mean	0.1121871
lower 95% Mean	-0.16552
N	6

Exhibit A8av.

Distributions Anion=Phosphate, Type of Sample=standard, Tank=SME
Raw Score Difference (ppm)
(M13-M14)



Quantiles

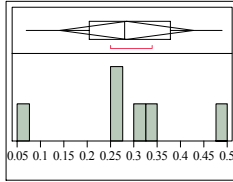
100.0%	maximum	0.45000
99.5%		0.45000
97.5%		0.45000
90.0%		0.45000
75.0%	quartile	0.34500
50.0%	median	0.11500
25.0%	quartile	0.00000
10.0%		0.00000
2.5%		0.00000
0.5%		0.00000
0.0%	minimum	0.00000

Moments

Mean	0.165
Std Dev	0.1820714
Std Err Mean	0.0743303
upper 95% Mean	0.3560722
lower 95% Mean	-0.026072
N	6

Exhibit A8aw.

Distributions Anion=Phosphate,
Type of Sample=standard,
Tank=SRAT Product
Raw Score Difference (ppm)
(M13-M14)



Quantiles

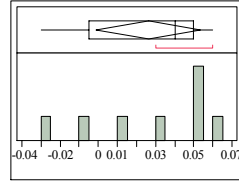
100.0%	maximum	0.49000
99.5%		0.49000
97.5%		0.49000
90.0%		0.49000
75.0%	quartile	0.37750
50.0%	median	0.28000
25.0%	quartile	0.20500
10.0%		0.07000
2.5%		0.07000
0.5%		0.07000
0.0%	minimum	0.07000

Moments

Mean	0.285
Std Dev	0.1373681
Std Err Mean	0.0560803
upper 95% Mean	0.429159
lower 95% Mean	0.140841
N	6

Exhibit A8ay.

Distributions Anion=Sulfate, Type
of Sample=process, Tank=SME
Raw Score Difference (ppm)
(M13-M14)



Quantiles

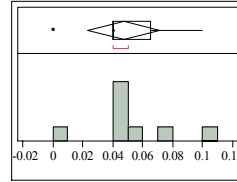
100.0%	maximum	0.0600
99.5%		0.0600
97.5%		0.0600
90.0%		0.0600
75.0%	quartile	0.0500
50.0%	median	0.0400
25.0%	quartile	-0.0050
10.0%		-0.0300
2.5%		-0.0300
0.5%		-0.0300
0.0%	minimum	-0.0300

Moments

Mean	0.02625
Std Dev	0.0329231
Std Err Mean	0.0116401
upper 95% Mean	0.0537744
lower 95% Mean	-0.001274
N	8

Exhibit A8ba.

Distributions Anion=Sulfate, Type
of Sample=process, Tank=SRAT
Receipt
Raw Score Difference (ppm)
(M13-M14)



Quantiles

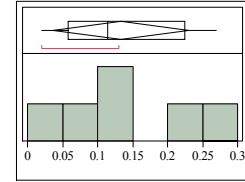
100.0%	maximum	0.10000
99.5%		0.10000
97.5%		0.10000
90.0%		0.10000
75.0%	quartile	0.06500
50.0%	median	0.04000
25.0%	quartile	0.04000
10.0%		0.00000
2.5%		0.00000
0.5%		0.00000
0.0%	minimum	0.00000

Moments

Mean	0.0475
Std Dev	0.0286606
Std Err Mean	0.010133
upper 95% Mean	0.0714608
lower 95% Mean	0.0235392
N	8

Exhibit A8bc.

Distributions Anion=Sulfate, Type
of Sample=standard, Tank=SRAT
Product
Raw Score Difference (ppm)
(M13-M14)



Quantiles

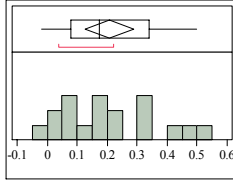
100.0%	maximum	0.27000
99.5%		0.27000
97.5%		0.27000
90.0%		0.27000
75.0%	quartile	0.22500
50.0%	median	0.11500
25.0%	quartile	0.05750
10.0%		0.02000
2.5%		0.02000
0.5%		0.02000
0.0%	minimum	0.02000

Moments

Mean	0.1333333
Std Dev	0.0922316
Std Err Mean	0.0376534
upper 95% Mean	0.2301245
lower 95% Mean	0.0365422
N	6

Exhibit A8ax.

Distributions Anion=Phosphate,
Type of Sample=standard,
Tank=SRAT Receipt
Raw Score Difference (ppm)
(M13-M14)



Quantiles

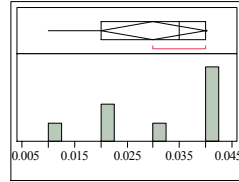
100.0%	maximum	0.5000
99.5%		0.5000
97.5%		0.5000
90.0%		0.4910
75.0%	quartile	0.3400
50.0%	median	0.1750
25.0%	quartile	0.0800
10.0%		0.0070
2.5%		-0.0200
0.5%		-0.0200
0.0%	minimum	-0.0200

Moments

Mean	0.2089556
Std Dev	0.1630253
Std Err Mean	0.0384254
upper 95% Mean	0.2900261
lower 95% Mean	0.127885
N	18

Exhibit A8az.

Distributions Anion=Sulfate, Type
of Sample=process, Tank=SRAT
Product
Raw Score Difference (ppm)
(M13-M14)



Quantiles

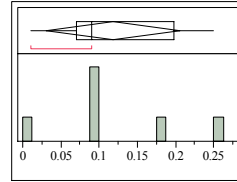
100.0%	maximum	0.04000
99.5%		0.04000
97.5%		0.04000
90.0%		0.04000
75.0%	quartile	0.04000
50.0%	median	0.03500
25.0%	quartile	0.02000
10.0%		0.01000
2.5%		0.01000
0.5%		0.01000
0.0%	minimum	0.01000

Moments

Mean	0.03
Std Dev	0.0119523
Std Err Mean	0.0042258
upper 95% Mean	0.0399924
lower 95% Mean	0.0200076
N	8

Exhibit A8bb.

Distributions Anion=Sulfate, Type
of Sample=standard, Tank=SME
Raw Score Difference (ppm)
(M13-M14)



Quantiles

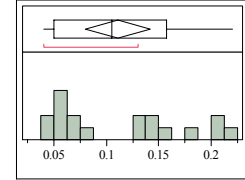
100.0%	maximum	0.25000
99.5%		0.25000
97.5%		0.25000
90.0%		0.25000
75.0%	quartile	0.19750
50.0%	median	0.09000
25.0%	quartile	0.07000
10.0%		0.01000
2.5%		0.01000
0.5%		0.01000
0.0%	minimum	0.01000

Moments

Mean	0.1183333
Std Dev	0.084004
Std Err Mean	0.0342945
upper 95% Mean	0.2064901
lower 95% Mean	0.0301766
N	6

Exhibit A8bd.

Distributions Anion=Sulfate, Type
of Sample=standard, Tank=SRAT
Receipt
Raw Score Difference (ppm)
(M13-M14)



Quantiles

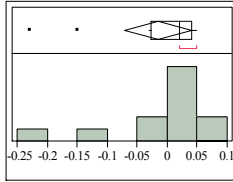
100.0%	maximum	0.22000
99.5%		0.22000
97.5%		0.22000
90.0%		0.20200
75.0%	quartile	0.15750
50.0%	median	0.10500
25.0%	quartile	0.05000
10.0%		0.04000
2.5%		0.04000
0.5%		0.04000
0.0%	minimum	0.04000

Moments

Mean	0.1105556
Std Dev	0.0621641
Std Err Mean	0.0146522
upper 95% Mean	0.1414691
lower 95% Mean	0.0796421
N	18

Exhibit A8be.

Distributions Anion=Chloride,
Type of Sample=standard, Bottle
ID=16ppm
Raw Score Difference (ppm)
(M13-M14)



Quantiles

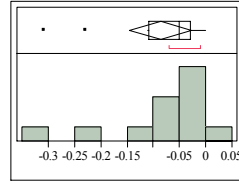
100.0%	maximum	0.0500
99.5%		0.0500
97.5%		0.0500
90.0%		0.0500
75.0%	quartile	0.0400
50.0%	median	0.0200
25.0%	quartile	-0.0275
10.0%		-0.2060
2.5%		-0.2300
0.5%		-0.2300
0.0%	minimum	-0.2300

Moments

Mean	-0.015
Std Dev	0.0873343
Std Err Mean	0.0252112
upper 95% Mean	0.0404895
lower 95% Mean	-0.07049
N	12

Exhibit A8bg.

Distributions Anion=Fluoride,
Type of Sample=standard, Bottle
ID=16ppm
Raw Score Difference (ppm)
(M13-M14)



Quantiles

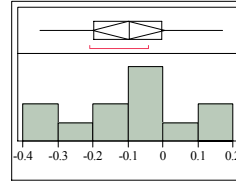
100.0%	maximum	0.0000
99.5%		0.0000
97.5%		0.0000
90.0%		-0.0030
75.0%	quartile	-0.0300
50.0%	median	-0.0500
25.0%	quartile	-0.1075
10.0%		-0.2860
2.5%		-0.3100
0.5%		-0.3100
0.0%	minimum	-0.3100

Moments

Mean	-0.085833
Std Dev	0.0935617
Std Err Mean	0.0270089
upper 95% Mean	-0.026387
lower 95% Mean	-0.14528
N	12

Exhibit A8bi.

Distributions Anion=Formate,
Type of Sample=standard, Bottle
ID=16ppm
Raw Score Difference (ppm)
(M13-M14)



Quantiles

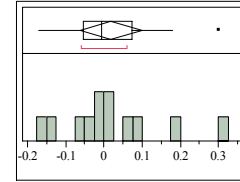
100.0%	maximum	0.1700
99.5%		0.1700
97.5%		0.1700
90.0%		0.1670
75.0%	quartile	-0.0025
50.0%	median	-0.0950
25.0%	quartile	-0.1975
10.0%		-0.3440
2.5%		-0.3500
0.5%		-0.3500
0.0%	minimum	-0.3500

Moments

Mean	-0.0975
Std Dev	0.1628789
Std Err Mean	0.0470191
upper 95% Mean	0.0059883
lower 95% Mean	-0.200988
N	12

Exhibit A8bk.

Distributions Anion=Nitrate, Type
of Sample=standard, Bottle
ID=16ppm
Raw Score Difference (ppm)
(M13-M14)



Quantiles

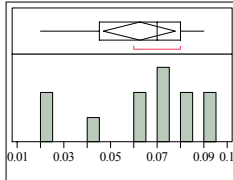
100.0%	maximum	0.3000
99.5%		0.3000
97.5%		0.3000
90.0%		0.2640
75.0%	quartile	0.0750
50.0%	median	-0.0050
25.0%	quartile	-0.0550
10.0%		-0.1580
2.5%		-0.1700
0.5%		-0.1700
0.0%	minimum	-0.1700

Moments

Mean	0.0183333
Std Dev	0.1279086
Std Err Mean	0.036924
upper 95% Mean	0.0996026
lower 95% Mean	-0.062936
N	12

Exhibit A8bf.

Distributions Anion=Chloride,
Type of Sample=standard, Bottle
ID=2ppm
Raw Score Difference (ppm)
(M13-M14)



Quantiles

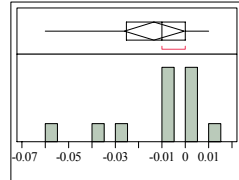
100.0%	maximum	0.09000
99.5%		0.09000
97.5%		0.09000
90.0%		0.09000
75.0%	quartile	0.08000
50.0%	median	0.07000
25.0%	quartile	0.04500
10.0%		0.02000
2.5%		0.02000
0.5%		0.02000
0.0%	minimum	0.02000

Moments

Mean	0.0625
Std Dev	0.024168
Std Err Mean	0.0069767
upper 95% Mean	0.0778556
lower 95% Mean	0.0471444
N	12

Exhibit A8bh.

Distributions Anion=Fluoride,
Type of Sample=standard, Bottle
ID=2ppm
Raw Score Difference (ppm)
(M13-M14)



Quantiles

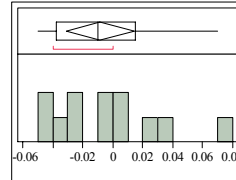
100.0%	maximum	0.0100
99.5%		0.0100
97.5%		0.0100
90.0%		0.0070
75.0%	quartile	0.0000
50.0%	median	-0.0100
25.0%	quartile	-0.0250
10.0%		-0.0540
2.5%		-0.0600
0.5%		-0.0600
0.0%	minimum	-0.0600

Moments

Mean	-0.013333
Std Dev	0.0201509
Std Err Mean	0.0058171
upper 95% Mean	-0.00053
lower 95% Mean	-0.026137
N	12

Exhibit A8bj.

Distributions Anion=Formate,
Type of Sample=standard, Bottle
ID=2ppm
Raw Score Difference (ppm)
(M13-M14)



Quantiles

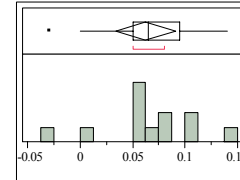
100.0%	maximum	0.0700
99.5%		0.0700
97.5%		0.0700
90.0%		0.0580
75.0%	quartile	0.0150
50.0%	median	-0.0100
25.0%	quartile	-0.0375
10.0%		-0.0500
2.5%		-0.0500
0.5%		-0.0500
0.0%	minimum	-0.0500

Moments

Mean	-0.008333
Std Dev	0.0356328
Std Err Mean	0.0102863
upper 95% Mean	0.0143067
lower 95% Mean	-0.030973
N	12

Exhibit A8bl.

Distributions Anion=Nitrate, Type
of Sample=standard, Bottle
ID=2ppm
Raw Score Difference (ppm)
(M13-M14)



Quantiles

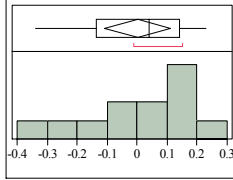
100.0%	maximum	0.1400
99.5%		0.1400
97.5%		0.1400
90.0%		0.1280
75.0%	quartile	0.0950
50.0%	median	0.0650
25.0%	quartile	0.0500
10.0%		-0.0210
2.5%		-0.0300
0.5%		-0.0300
0.0%	minimum	-0.0300

Moments

Mean	0.0625
Std Dev	0.0451513
Std Err Mean	0.013034
upper 95% Mean	0.0911877
lower 95% Mean	0.0338123
N	12

Exhibit A8bm.

Distributions Anion=Nitrite, Type of Sample=standard, Bottle ID=16ppm
Raw Score Difference (ppm) (M13-M14)



Quantiles

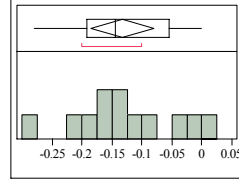
100.0%	maximum	0.2300
99.5%		0.2300
97.5%		0.2300
90.0%		0.2060
75.0%	quartile	0.1400
50.0%	median	0.0400
25.0%	quartile	-0.1350
10.0%		-0.3100
2.5%		-0.3400
0.5%		-0.3400
0.0%	minimum	-0.3400

Moments

Mean	0.0008333
Std Dev	0.1725456
Std Err Mean	0.0498096
upper 95% Mean	0.1104636
lower 95% Mean	-0.108797
N	12

Exhibit A8bo.

Distributions Anion=Oxalate, Type of Sample=standard, Bottle ID=16ppm
Raw Score Difference (ppm) (M13-M14)



Quantiles

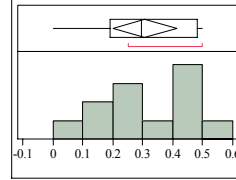
100.0%	maximum	0.0000
99.5%		0.0000
97.5%		0.0000
90.0%		-0.0060
75.0%	quartile	-0.0550
50.0%	median	-0.1450
25.0%	quartile	-0.1925
10.0%		-0.2590
2.5%		-0.2800
0.5%		-0.2800
0.0%	minimum	-0.2800

Moments

Mean	-0.1325
Std Dev	0.0830252
Std Err Mean	0.0239673
upper 95% Mean	-0.079748
lower 95% Mean	-0.185252
N	12

Exhibit A8bq.

Distributions Anion=Phosphate, Type of Sample=standard, Bottle ID=16ppm
Raw Score Difference (ppm) (M13-M14)



Quantiles

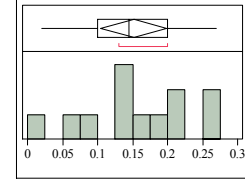
100.0%	maximum	0.50000
99.5%		0.50000
97.5%		0.50000
90.0%		0.49700
75.0%	quartile	0.48000
50.0%	median	0.29510
25.0%	quartile	0.19000
10.0%		0.03030
2.5%		0.00000
0.5%		0.00000
0.0%	minimum	0.00000

Moments

Mean	0.3067667
Std Dev	0.1691335
Std Err Mean	0.0488246
upper 95% Mean	0.414229
lower 95% Mean	0.1993044
N	12

Exhibit A8bs.

Distributions Anion=Sulfate, Type of Sample=standard, Bottle ID=16ppm
Raw Score Difference (ppm) (M13-M14)



Quantiles

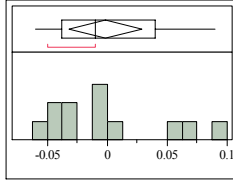
100.0%	maximum	0.27000
99.5%		0.27000
97.5%		0.27000
90.0%		0.26400
75.0%	quartile	0.20000
50.0%	median	0.14500
25.0%	quartile	0.10000
10.0%		0.02900
2.5%		0.02000
0.5%		0.02000
0.0%	minimum	0.02000

Moments

Mean	0.1516667
Std Dev	0.0746913
Std Err Mean	0.0215615
upper 95% Mean	0.1991232
lower 95% Mean	0.1042101
N	12

Exhibit A8bn.

Distributions Anion=Nitrite, Type of Sample=standard, Bottle ID=2ppm
Raw Score Difference (ppm) (M13-M14)



Quantiles

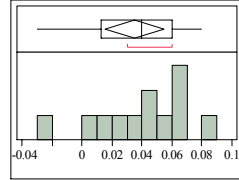
100.0%	maximum	0.0900
99.5%		0.0900
97.5%		0.0900
90.0%		0.0840
75.0%	quartile	0.0400
50.0%	median	-0.0100
25.0%	quartile	-0.0375
10.0%		-0.0570
2.5%		-0.0600
0.5%		-0.0600
0.0%	minimum	-0.0600

Moments

Mean	-0.001667
Std Dev	0.0480215
Std Err Mean	0.0138626
upper 95% Mean	0.0288447
lower 95% Mean	-0.032178
N	12

Exhibit A8bp.

Distributions Anion=Oxalate, Type of Sample=standard, Bottle ID=2ppm
Raw Score Difference (ppm) (M13-M14)



Quantiles

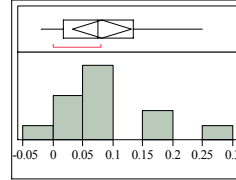
100.0%	maximum	0.0800
99.5%		0.0800
97.5%		0.0800
90.0%		0.0740
75.0%	quartile	0.0600
50.0%	median	0.0400
25.0%	quartile	0.0125
10.0%		-0.0210
2.5%		-0.0300
0.5%		-0.0300
0.0%	minimum	-0.0300

Moments

Mean	0.035
Std Dev	0.0308957
Std Err Mean	0.0089188
upper 95% Mean	0.0546302
lower 95% Mean	0.0153698
N	12

Exhibit A8br.

Distributions Anion=Phosphate, Type of Sample=standard, Bottle ID=2ppm
Raw Score Difference (ppm) (M13-M14)



Quantiles

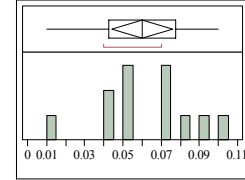
100.0%	maximum	0.2500
99.5%		0.2500
97.5%		0.2500
90.0%		0.2260
75.0%	quartile	0.1350
50.0%	median	0.0750
25.0%	quartile	0.0175
10.0%		-0.0140
2.5%		-0.0200
0.5%		-0.0200
0.0%	minimum	-0.0200

Moments

Mean	0.0825
Std Dev	0.0768854
Std Err Mean	0.0221949
upper 95% Mean	0.1313506
lower 95% Mean	0.0336494
N	12

Exhibit A8bt.

Distributions Anion=Sulfate, Type of Sample=standard, Bottle ID=2ppm
Raw Score Difference (ppm) (M13-M14)



Quantiles

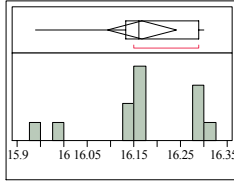
100.0%	maximum	0.10000
99.5%		0.10000
97.5%		0.10000
90.0%		0.09700
75.0%	quartile	0.07750
50.0%	median	0.06000
25.0%	quartile	0.04250
10.0%		0.01900
2.5%		0.01000
0.5%		0.01000
0.0%	minimum	0.01000

Moments

Mean	0.06
Std Dev	0.0248633
Std Err Mean	0.0071774
upper 95% Mean	0.0757974
lower 95% Mean	0.0442026
N	12

Exhibit A9a.

Distributions Anion=Chloride,
Type of Sample=standard, Bottle
ID=16ppm
M-13 ICS3000 raw (ppm)



Quantiles

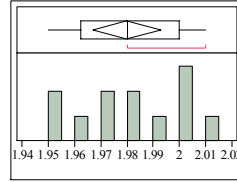
100.0%	maximum	16.300
99.5%		16.300
97.5%		16.300
90.0%		16.297
75.0%	quartile	16.290
50.0%	median	16.160
25.0%	quartile	16.133
10.0%		15.955
2.5%		15.940
0.5%		15.940
0.0%	minimum	15.940

Moments

Mean	16.1675
Std Dev	0.1161602
Std Err Mean	0.0335325
upper 95% Mean	16.241305
lower 95% Mean	16.093695
N	12

Exhibit A9b.

Distributions Anion=Chloride,
Type of Sample=standard, Bottle
ID=2ppm
M-13 ICS3000 raw (ppm)



Quantiles

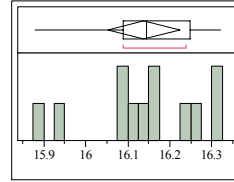
100.0%	maximum	2.0100
99.5%		2.0100
97.5%		2.0100
90.0%		2.0070
75.0%	quartile	2.0000
50.0%	median	1.9800
25.0%	quartile	1.9625
10.0%		1.9500
2.5%		1.9500
0.5%		1.9500
0.0%	minimum	1.9500

Moments

Mean	1.98
Std Dev	0.0204495
Std Err Mean	0.0059033
upper 95% Mean	1.992993
lower 95% Mean	1.967007
N	12

Exhibit A9c.

Distributions Anion=Fluoride,
Type of Sample=standard, Bottle
ID=16ppm
M-13 ICS3000 raw (ppm)



Quantiles

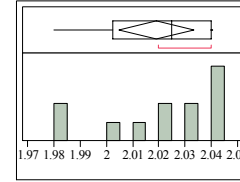
100.0%	maximum	16.320
99.5%		16.320
97.5%		16.320
90.0%		16.317
75.0%	quartile	16.248
50.0%	median	16.145
25.0%	quartile	16.090
10.0%		15.898
2.5%		15.880
0.5%		15.880
0.0%	minimum	15.880

Moments

Mean	16.138333
Std Dev	0.134085
Std Err Mean	0.038707
upper 95% Mean	16.223527
lower 95% Mean	16.05314
N	12

Exhibit A9d.

Distributions Anion=Fluoride,
Type of Sample=standard, Bottle
ID=2ppm
M-13 ICS3000 raw (ppm)



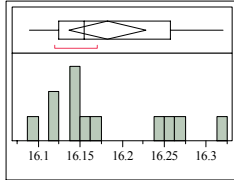
Quantiles

100.0%	maximum	2.0400
99.5%		2.0400
97.5%		2.0400
90.0%		2.0400
75.0%	quartile	2.0400
50.0%	median	2.0250
25.0%	quartile	2.0025
10.0%		1.9800
2.5%		1.9800
0.5%		1.9800
0.0%	minimum	1.9800

Moments

Mean	2.0191667
Std Dev	0.0223437
Std Err Mean	0.0064501
upper 95% Mean	2.0333632
lower 95% Mean	2.0049701
N	12

M-14 ICS3000 raw (ppm)



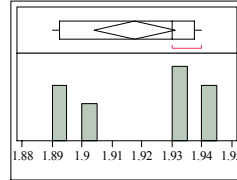
Quantiles

100.0%	maximum	16.320
99.5%		16.320
97.5%		16.320
90.0%		16.305
75.0%	quartile	16.258
50.0%	median	16.155
25.0%	quartile	16.125
10.0%		16.099
2.5%		16.090
0.5%		16.090
0.0%	minimum	16.090

Moments

Mean	16.1825
Std Dev	0.0731282
Std Err Mean	0.0211103
upper 95% Mean	16.228963
lower 95% Mean	16.136037
N	12

M-14 ICS3000 raw (ppm)



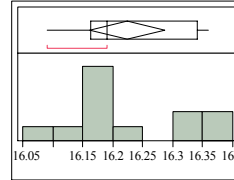
Quantiles

100.0%	maximum	1.9400
99.5%		1.9400
97.5%		1.9400
90.0%		1.9400
75.0%	quartile	1.9375
50.0%	median	1.9300
25.0%	quartile	1.8925
10.0%		1.8900
2.5%		1.8900
0.5%		1.8900
0.0%	minimum	1.8900

Moments

Mean	1.9175
Std Dev	0.0213733
Std Err Mean	0.0061699
upper 95% Mean	1.93108
lower 95% Mean	1.90392
N	12

M-14 ICS3000 raw (ppm)



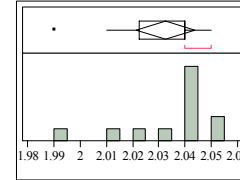
Quantiles

100.0%	maximum	16.360
99.5%		16.360
97.5%		16.360
90.0%		16.360
75.0%	quartile	16.340
50.0%	median	16.190
25.0%	quartile	16.163
10.0%		16.093
2.5%		16.090
0.5%		16.090
0.0%	minimum	16.090

Moments

Mean	16.224167
Std Dev	0.0997687
Std Err Mean	0.0288007
upper 95% Mean	16.287557
lower 95% Mean	16.160777
N	12

M-14 ICS3000 raw (ppm)



Quantiles

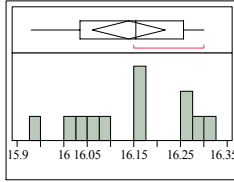
100.0%	maximum	2.0500
99.5%		2.0500
97.5%		2.0500
90.0%		2.0500
75.0%	quartile	2.0400
50.0%	median	2.0400
25.0%	quartile	2.0225
10.0%		1.9960
2.5%		1.9900
0.5%		1.9900
0.0%	minimum	1.9900

Moments

Mean	2.0325
Std Dev	0.0176455
Std Err Mean	0.0050938
upper 95% Mean	2.0437114
lower 95% Mean	2.0212886
N	12

Exhibit A9e.

Distributions Anion=Formate,
Type of Sample=standard, Bottle
ID=16ppm
M-13 ICS3000 raw (ppm)



Quantiles

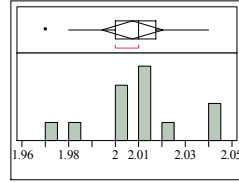
100.0%	maximum	16.300
99.5%		16.300
97.5%		16.300
90.0%		16.297
75.0%	quartile	16.258
50.0%	median	16.155
25.0%	quartile	16.035
10.0%		15.951
2.5%		15.930
0.5%		15.930
0.0%	minimum	15.930

Moments

Mean	16.139167
Std Dev	0.1219134
Std Err Mean	0.0351934
upper 95% Mean	16.216627
lower 95% Mean	16.061707
N	12

Exhibit A9f.

Distributions Anion=Formate,
Type of Sample=standard, Bottle
ID=2ppm
M-13 ICS3000 raw (ppm)



Quantiles

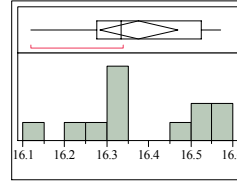
100.0%	maximum	2.0400
99.5%		2.0400
97.5%		2.0400
90.0%		2.0400
75.0%	quartile	2.0175
50.0%	median	2.0100
25.0%	quartile	2.0000
10.0%		1.9730
2.5%		1.9700
0.5%		1.9700
0.0%	minimum	1.9700

Moments

Mean	2.0075
Std Dev	0.020505
Std Err Mean	0.0059193
upper 95% Mean	2.0205282
lower 95% Mean	1.9944718
N	12

Exhibit A9g.

Distributions Anion=Nitrate, Type
of Sample=standard, Bottle
ID=16ppm
M-13 ICS3000 raw (ppm)



Quantiles

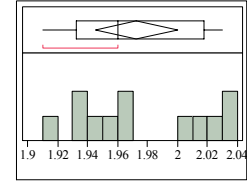
100.0%	maximum	16.570
99.5%		16.570
97.5%		16.570
90.0%		16.567
75.0%	quartile	16.525
50.0%	median	16.335
25.0%	quartile	16.278
10.0%		16.147
2.5%		16.120
0.5%		16.120
0.0%	minimum	16.120

Moments

Mean	16.375833
Std Dev	0.1462537
Std Err Mean	0.0422198
upper 95% Mean	16.468759
lower 95% Mean	16.282908
N	12

Exhibit A9h.

Distributions Anion=Nitrate, Type
of Sample=standard, Bottle
ID=2ppm
M-13 ICS3000 raw (ppm)



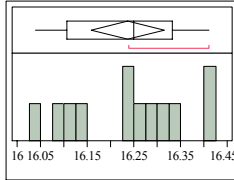
Quantiles

100.0%	maximum	2.0300
99.5%		2.0300
97.5%		2.0300
90.0%		2.0300
75.0%	quartile	2.0175
50.0%	median	1.9600
25.0%	quartile	1.9325
10.0%		1.9160
2.5%		1.9100
0.5%		1.9100
0.0%	minimum	1.9100

Moments

Mean	1.9725
Std Dev	0.0430908
Std Err Mean	0.0124392
upper 95% Mean	1.9998786
lower 95% Mean	1.9451214
N	12

M-14 ICS3000 raw (ppm)



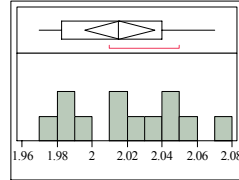
Quantiles

100.0%	maximum	16.410
99.5%		16.410
97.5%		16.410
90.0%		16.410
75.0%	quartile	16.333
50.0%	median	16.250
25.0%	quartile	16.108
10.0%		16.055
2.5%		16.040
0.5%		16.040
0.0%	minimum	16.040

Moments

Mean	16.236667
Std Dev	0.1239012
Std Err Mean	0.0357672
upper 95% Mean	16.31539
lower 95% Mean	16.157944
N	12

M-14 ICS3000 raw (ppm)



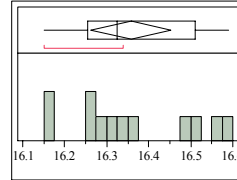
Quantiles

100.0%	maximum	2.0700
99.5%		2.0700
97.5%		2.0700
90.0%		2.0640
75.0%	quartile	2.0400
50.0%	median	2.0150
25.0%	quartile	1.9825
10.0%		1.9730
2.5%		1.9700
0.5%		1.9700
0.0%	minimum	1.9700

Moments

Mean	2.0158333
Std Dev	0.0314667
Std Err Mean	0.0090836
upper 95% Mean	2.0358263
lower 95% Mean	1.9958404
N	12

M-14 ICS3000 raw (ppm)



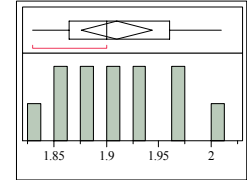
Quantiles

100.0%	maximum	16.590
99.5%		16.590
97.5%		16.590
90.0%		16.584
75.0%	quartile	16.510
50.0%	median	16.325
25.0%	quartile	16.255
10.0%		16.153
2.5%		16.150
0.5%		16.150
0.0%	minimum	16.150

Moments

Mean	16.3575
Std Dev	0.1504614
Std Err Mean	0.0434345
upper 95% Mean	16.453099
lower 95% Mean	16.261901
N	12

M-14 ICS3000 raw (ppm)



Quantiles

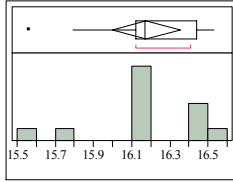
100.0%	maximum	2.0100
99.5%		2.0100
97.5%		2.0100
90.0%		1.9980
75.0%	quartile	1.9600
50.0%	median	1.9000
25.0%	quartile	1.8650
10.0%		1.8390
2.5%		1.8300
0.5%		1.8300
0.0%	minimum	1.8300

Moments

Mean	1.91
Std Dev	0.0534279
Std Err Mean	0.0154233
upper 95% Mean	1.9439465
lower 95% Mean	1.8760535
N	12

Exhibit A9i.

Distributions Anion=Nitrite, Type of Sample=standard, Bottle ID=16ppm
M-13 ICS3000 raw (ppm)



Quantiles

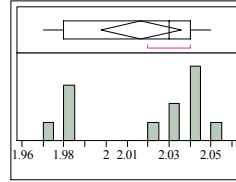
100.0%	maximum	16.530
99.5%		16.530
97.5%		16.530
90.0%		16.509
75.0%	quartile	16.440
50.0%	median	16.170
25.0%	quartile	16.123
10.0%		15.629
2.5%		15.560
0.5%		15.560
0.0%	minimum	15.560

Moments

Mean	16.176667
Std Dev	0.2812742
Std Err Mean	0.0811969
upper 95% Mean	16.35538
lower 95% Mean	15.997954
N	12

Exhibit A9j.

Distributions Anion=Nitrite, Type of Sample=standard, Bottle ID=2ppm
M-13 ICS3000 raw (ppm)



Quantiles

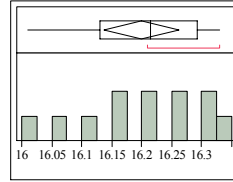
100.0%	maximum	2.0500
99.5%		2.0500
97.5%		2.0500
90.0%		2.0470
75.0%	quartile	2.0400
50.0%	median	2.0300
25.0%	quartile	1.9800
10.0%		1.9730
2.5%		1.9700
0.5%		1.9700
0.0%	minimum	1.9700

Moments

Mean	2.0166667
Std Dev	0.0299495
Std Err Mean	0.0086457
upper 95% Mean	2.0356956
lower 95% Mean	1.9976377
N	12

Exhibit A9k.

Distributions Anion=Oxalate, Type of Sample=standard, Bottle ID=16ppm
M-13 ICS3000 raw (ppm)



Quantiles

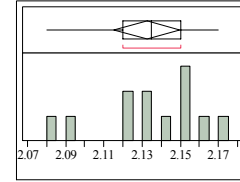
100.0%	maximum	16.330
99.5%		16.330
97.5%		16.330
90.0%		16.321
75.0%	quartile	16.293
50.0%	median	16.215
25.0%	quartile	16.130
10.0%		16.028
2.5%		16.010
0.5%		16.010
0.0%	minimum	16.010

Moments

Mean	16.2
Std Dev	0.0988111
Std Err Mean	0.0285243
upper 95% Mean	16.262782
lower 95% Mean	16.137218
N	12

Exhibit A9l.

Distributions Anion=Oxalate, Type of Sample=standard, Bottle ID=2ppm
M-13 ICS3000 raw (ppm)



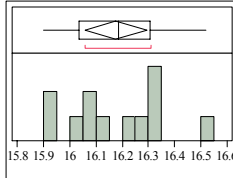
Quantiles

100.0%	maximum	2.1700
99.5%		2.1700
97.5%		2.1700
90.0%		2.1670
75.0%	quartile	2.1500
50.0%	median	2.1350
25.0%	quartile	2.1200
10.0%		2.0830
2.5%		2.0800
0.5%		2.0800
0.0%	minimum	2.0800

Moments

Mean	2.1325
Std Dev	0.0270101
Std Err Mean	0.0077971
upper 95% Mean	2.1496614
lower 95% Mean	2.1153386
N	12

M-14 ICS3000 raw (ppm)



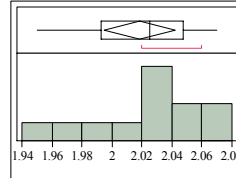
Quantiles

100.0%	maximum	16.520
99.5%		16.520
97.5%		16.520
90.0%		16.466
75.0%	quartile	16.308
50.0%	median	16.185
25.0%	quartile	16.038
10.0%		15.906
2.5%		15.900
0.5%		15.900
0.0%	minimum	15.900

Moments

Mean	16.175833
Std Dev	0.1856908
Std Err Mean	0.0536043
upper 95% Mean	16.293816
lower 95% Mean	16.057851
N	12

M-14 ICS3000 raw (ppm)



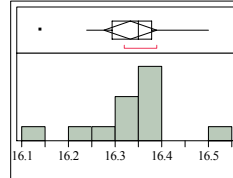
Quantiles

100.0%	maximum	2.0700
99.5%		2.0700
97.5%		2.0700
90.0%		2.0670
75.0%	quartile	2.0475
50.0%	median	2.0250
25.0%	quartile	1.9925
10.0%		1.9530
2.5%		1.9500
0.5%		1.9500
0.0%	minimum	1.9500

Moments

Mean	2.0183333
Std Dev	0.0373761
Std Err Mean	0.0107895
upper 95% Mean	2.0420809
lower 95% Mean	1.9945857
N	12

M-14 ICS3000 raw (ppm)



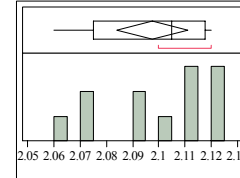
Quantiles

100.0%	maximum	16.500
99.5%		16.500
97.5%		16.500
90.0%		16.467
75.0%	quartile	16.378
50.0%	median	16.350
25.0%	quartile	16.293
10.0%		16.170
2.5%		16.140
0.5%		16.140
0.0%	minimum	16.140

Moments

Mean	16.3325
Std Dev	0.0880212
Std Err Mean	0.0254095
upper 95% Mean	16.388426
lower 95% Mean	16.276574
N	12

M-14 ICS3000 raw (ppm)



Quantiles

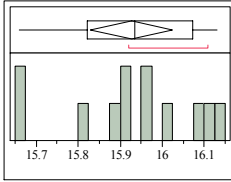
100.0%	maximum	2.1200
99.5%		2.1200
97.5%		2.1200
90.0%		2.1200
75.0%	quartile	2.1175
50.0%	median	2.1050
25.0%	quartile	2.0750
10.0%		2.0630
2.5%		2.0600
0.5%		2.0600
0.0%	minimum	2.0600

Moments

Mean	2.0975
Std Dev	0.0213733
Std Err Mean	0.0061699
upper 95% Mean	2.11108
lower 95% Mean	2.08392
N	12

Exhibit A9m.

Distributions Anion=Phosphate,
Type of Sample=standard, Bottle
ID=16ppm
M-13 ICS3000 raw (ppm)



Quantiles

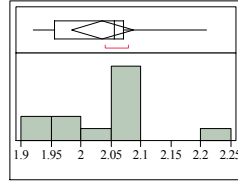
100.0%	maximum	16.130
99.5%		16.130
97.5%		16.130
90.0%		16.124
75.0%	quartile	16.073
50.0%	median	15.935
25.0%	quartile	15.823
10.0%		15.663
2.5%		15.660
0.5%		15.660
0.0%	minimum	15.660

Moments

Mean	15.926667
Std Dev	0.1556414
Std Err Mean	0.0449298
upper 95% Mean	16.025556
lower 95% Mean	15.827777
N	12

Exhibit A9n.

Distributions Anion=Phosphate,
Type of Sample=standard, Bottle
ID=2ppm
M-13 ICS3000 raw (ppm)



Quantiles

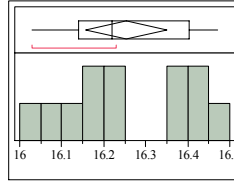
100.0%	maximum	2.2100
99.5%		2.2100
97.5%		2.2100
90.0%		2.1710
75.0%	quartile	2.0700
50.0%	median	2.0550
25.0%	quartile	1.9550
10.0%		1.9260
2.5%		1.9200
0.5%		1.9200
0.0%	minimum	1.9200

Moments

Mean	2.0358333
Std Dev	0.0802789
Std Err Mean	0.0231745
upper 95% Mean	2.0868401
lower 95% Mean	1.9848266
N	12

Exhibit A9o.

Distributions Anion=Sulfate, Type
of Sample=standard, Bottle
ID=16ppm
M-13 ICS3000 raw (ppm)



Quantiles

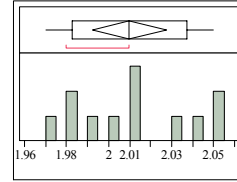
100.0%	maximum	16.470
99.5%		16.470
97.5%		16.470
90.0%		16.461
75.0%	quartile	16.403
50.0%	median	16.220
25.0%	quartile	16.140
10.0%		16.036
2.5%		16.030
0.5%		16.030
0.0%	minimum	16.030

Moments

Mean	16.254167
Std Dev	0.151625
Std Err Mean	0.0437704
upper 95% Mean	16.350505
lower 95% Mean	16.157829
N	12

Exhibit A9p.

Distributions Anion=Sulfate, Type
of Sample=standard, Bottle
ID=2ppm
M-13 ICS3000 raw (ppm)



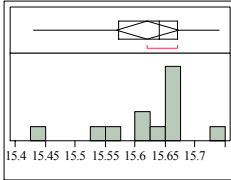
Quantiles

100.0%	maximum	2.0500
99.5%		2.0500
97.5%		2.0500
90.0%		2.0500
75.0%	quartile	2.0375
50.0%	median	2.0100
25.0%	quartile	1.9825
10.0%		1.9730
2.5%		1.9700
0.5%		1.9700
0.0%	minimum	1.9700

Moments

Mean	2.01
Std Dev	0.027634
Std Err Mean	0.0079772
upper 95% Mean	2.0275578
lower 95% Mean	1.9924422
N	12

M-14 ICS3000 raw (ppm)



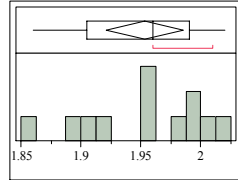
Quantiles

100.0%	maximum	15.740
99.5%		15.740
97.5%		15.740
90.0%		15.719
75.0%	quartile	15.670
50.0%	median	15.640
25.0%	quartile	15.572
10.0%		15.460
2.5%		15.430
0.5%		15.430
0.0%	minimum	15.430

Moments

Mean	15.6199
Std Dev	0.0811984
Std Err Mean	0.0234399
upper 95% Mean	15.671491
lower 95% Mean	15.568309
N	12

M-14 ICS3000 raw (ppm)



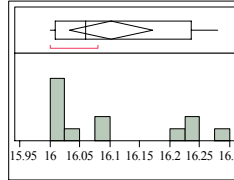
Quantiles

100.0%	maximum	2.0200
99.5%		2.0200
97.5%		2.0200
90.0%		2.0170
75.0%	quartile	1.9900
50.0%	median	1.9600
25.0%	quartile	1.9050
10.0%		1.8690
2.5%		1.8600
0.5%		1.8600
0.0%	minimum	1.8600

Moments

Mean	1.9533333
Std Dev	0.0503322
Std Err Mean	0.0145297
upper 95% Mean	1.9853129
lower 95% Mean	1.9213538
N	12

M-14 ICS3000 raw (ppm)



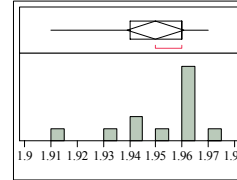
Quantiles

100.0%	maximum	16.280
99.5%		16.280
97.5%		16.280
90.0%		16.268
75.0%	quartile	16.235
50.0%	median	16.060
25.0%	quartile	16.010
10.0%		16.000
2.5%		16.000
0.5%		16.000
0.0%	minimum	16.000

Moments

Mean	16.1025
Std Dev	0.1098035
Std Err Mean	0.0316976
upper 95% Mean	16.172266
lower 95% Mean	16.032734
N	12

M-14 ICS3000 raw (ppm)



Quantiles

100.0%	maximum	1.9700
99.5%		1.9700
97.5%		1.9700
90.0%		1.9670
75.0%	quartile	1.9600
50.0%	median	1.9600
25.0%	quartile	1.9400
10.0%		1.9160
2.5%		1.9100
0.5%		1.9100
0.0%	minimum	1.9100

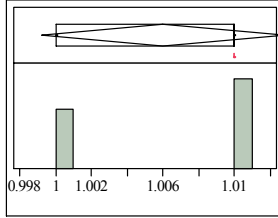
Moments

Mean	1.95
Std Dev	0.0170561
Std Err Mean	0.0049237
upper 95% Mean	1.9608369
lower 95% Mean	1.9391631
N	12

Exhibit A10a.

Distributions Type=Simulated
Sample Crosscheck Data 5000X
Dilution, Simulant=SME, Known
Concentration (ppm)=1,
Anion=Chloride, ICS-3000

Instrument=M-13
Measurement (ppm)



Quantiles

100.0%	maximum	1.0100
99.5%		1.0100
97.5%		1.0100
90.0%		1.0100
75.0%	quartile	1.0100
50.0%	median	1.0100
25.0%	quartile	1.0000
10.0%		1.0000
2.5%		1.0000
0.5%		1.0000
0.0%	minimum	1.0000

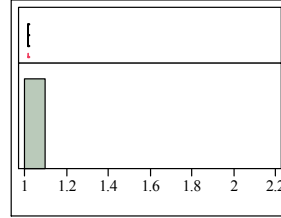
Moments

Mean	1.006
Std Dev	0.0054772
Std Err Mean	0.0024495
upper 95% Mean	1.0128009
lower 95% Mean	0.9991991
N	5

Exhibit A10b.

Distributions Type=Simulated
Sample Crosscheck Data 5000X
Dilution, Simulant=SME, Known
Concentration (ppm)=1,
Anion=Fluoride, ICS-3000

Instrument=M-13
Measurement (ppm)



Quantiles

100.0%	maximum	1.0200
99.5%		1.0200
97.5%		1.0200
90.0%		1.0200
75.0%	quartile	1.0200
50.0%	median	1.0200
25.0%	quartile	1.0200
10.0%		1.0200
2.5%		1.0200
0.5%		1.0200
0.0%	minimum	1.0200

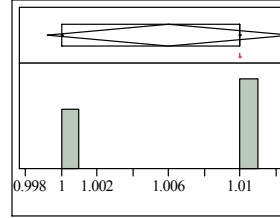
Moments

Mean	1.02
Std Dev	0
Std Err Mean	0
upper 95% Mean	1.02
lower 95% Mean	1.02
N	5

Exhibit A10c.

Distributions Type=Simulated
Sample Crosscheck Data 5000X
Dilution, Simulant=SME, Known
Concentration (ppm)=1,
Anion=Nitrite, ICS-3000

Instrument=M-13
Measurement (ppm)



Quantiles

100.0%	maximum	1.0100
99.5%		1.0100
97.5%		1.0100
90.0%		1.0100
75.0%	quartile	1.0100
50.0%	median	1.0100
25.0%	quartile	1.0000
10.0%		1.0000
2.5%		1.0000
0.5%		1.0000
0.0%	minimum	1.0000

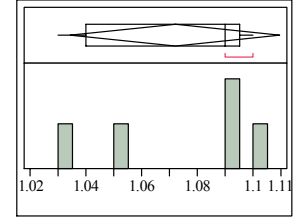
Moments

Mean	1.006
Std Dev	0.0054772
Std Err Mean	0.0024495
upper 95% Mean	1.0128009
lower 95% Mean	0.9991991
N	5

Exhibit A10d.

Distributions Type=Simulated
Sample Crosscheck Data 5000X
Dilution, Simulant=SME, Known
Concentration (ppm)=1,
Anion=Oxalate, ICS-3000

Instrument=M-13
Measurement (ppm)



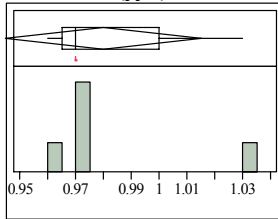
Quantiles

100.0%	maximum	1.1000
99.5%		1.1000
97.5%		1.1000
90.0%		1.1000
75.0%	quartile	1.0950
50.0%	median	1.0900
25.0%	quartile	1.0400
10.0%		1.0300
2.5%		1.0300
0.5%		1.0300
0.0%	minimum	1.0300

Moments

Mean	1.072
Std Dev	0.0303315
Std Err Mean	0.0135647
upper 95% Mean	1.1096615
lower 95% Mean	1.0343385
N	5

Instrument=M-14
Measurement (ppm)



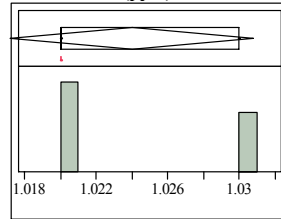
Quantiles

100.0%	maximum	1.0300
99.5%		1.0300
97.5%		1.0300
90.0%		1.0300
75.0%	quartile	1.0000
50.0%	median	0.9700
25.0%	quartile	0.9650
10.0%		0.9600
2.5%		0.9600
0.5%		0.9600
0.0%	minimum	0.9600

Moments

Mean	0.98
Std Dev	0.0282843
Std Err Mean	0.0126491
upper 95% Mean	1.0151196
lower 95% Mean	0.9448804
N	5

Instrument=M-14
Measurement (ppm)



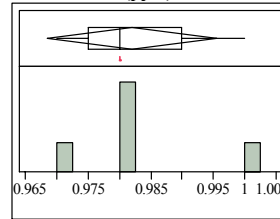
Quantiles

100.0%	maximum	1.0300
99.5%		1.0300
97.5%		1.0300
90.0%		1.0300
75.0%	quartile	1.0300
50.0%	median	1.0200
25.0%	quartile	1.0200
10.0%		1.0200
2.5%		1.0200
0.5%		1.0200
0.0%	minimum	1.0200

Moments

Mean	1.024
Std Dev	0.0054772
Std Err Mean	0.0024495
upper 95% Mean	1.0308009
lower 95% Mean	1.0171991
N	5

Instrument=M-14
Measurement (ppm)



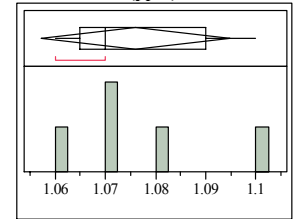
Quantiles

100.0%	maximum	1.0000
99.5%		1.0000
97.5%		1.0000
90.0%		1.0000
75.0%	quartile	0.9900
50.0%	median	0.9800
25.0%	quartile	0.9750
10.0%		0.9700
2.5%		0.9700
0.5%		0.9700
0.0%	minimum	0.9700

Moments

Mean	0.982
Std Dev	0.0109545
Std Err Mean	0.004899
upper 95% Mean	0.9956017
lower 95% Mean	0.9683983
N	5

Instrument=M-14
Measurement (ppm)



Quantiles

100.0%	maximum	1.1000
99.5%		1.1000
97.5%		1.1000
90.0%		1.1000
75.0%	quartile	1.0900
50.0%	median	1.0700
25.0%	quartile	1.0650
10.0%		1.0600
2.5%		1.0600
0.5%		1.0600
0.0%	minimum	1.0600

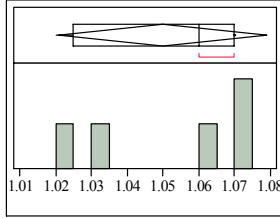
Moments

Mean	1.076
Std Dev	0.0151658
Std Err Mean	0.0067823
upper 95% Mean	1.0948308
lower 95% Mean	1.0571692
N	5

Exhibit A10e.

Distributions Type=Simulated
Sample Crosscheck Data 5000X
Dilution, Simulant=SME, Known
Concentration (ppm)=1,
Anion=Phosphate, ICS-3000

Instrument=M-13
Measurement (ppm)



Quantiles

100.0%	maximum	1.0700
99.5%		1.0700
97.5%		1.0700
90.0%		1.0700
75.0%	quartile	1.0700
50.0%	median	1.0600
25.0%	quartile	1.0250
10.0%		1.0200
2.5%		1.0200
0.5%		1.0200
0.0%	minimum	1.0200

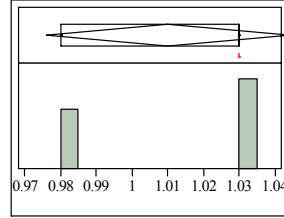
Moments

Mean	1.05
Std Dev	0.0234521
Std Err Mean	0.0104881
upper 95% Mean	1.0791196
lower 95% Mean	1.0208804
N	5

Exhibit A10f.

Distributions Type=Simulated
Sample Crosscheck Data 5000X
Dilution, Simulant=SME, Known
Concentration (ppm)=1,
Anion=Sulfate, ICS-3000

Instrument=M-13
Measurement (ppm)



Quantiles

100.0%	maximum	1.0300
99.5%		1.0300
97.5%		1.0300
90.0%		1.0300
75.0%	quartile	1.0300
50.0%	median	1.0300
25.0%	quartile	0.9800
10.0%		0.9800
2.5%		0.9800
0.5%		0.9800
0.0%	minimum	0.9800

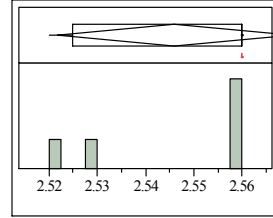
Moments

Mean	1.01
Std Dev	0.0273861
Std Err Mean	0.0122474
upper 95% Mean	1.0440044
lower 95% Mean	0.9759956
N	5

Exhibit A10g.

Distributions Type=Simulated
Sample Crosscheck Data 5000X
Dilution, Simulant=SME, Known
Concentration (ppm)=2.5,
Anion=Nitrate, ICS-3000

Instrument=M-13
Measurement (ppm)



Quantiles

100.0%	maximum	2.5600
99.5%		2.5600
97.5%		2.5600
90.0%		2.5600
75.0%	quartile	2.5600
50.0%	median	2.5600
25.0%	quartile	2.5250
10.0%		2.5200
2.5%		2.5200
0.5%		2.5200
0.0%	minimum	2.5200

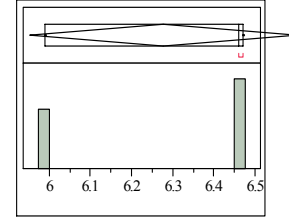
Moments

Mean	2.546
Std Dev	0.0194936
Std Err Mean	0.0087178
upper 95% Mean	2.5702045
lower 95% Mean	2.5217955
N	5

Exhibit A10h.

Distributions Type=Simulated
Sample Crosscheck Data 5000X
Dilution, Simulant=SME, Known
Concentration (ppm)=6,
Anion=Formate, ICS-3000

Instrument=M-13
Measurement (ppm)



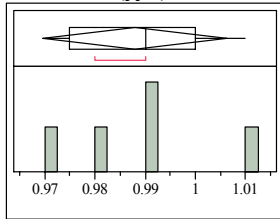
Quantiles

100.0%	maximum	6.4700
99.5%		6.4700
97.5%		6.4700
90.0%		6.4700
75.0%	quartile	6.4700
50.0%	median	6.4600
25.0%	quartile	5.9900
10.0%		5.9900
2.5%		5.9900
0.5%		5.9900
0.0%	minimum	5.9900

Moments

Mean	6.276
Std Dev	0.261113
Std Err Mean	0.1167733
upper 95% Mean	6.6002146
lower 95% Mean	5.9517854
N	5

Instrument=M-14
Measurement (ppm)



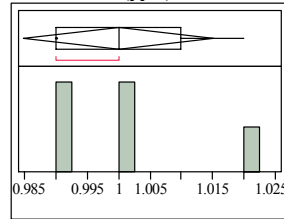
Quantiles

100.0%	maximum	1.0100
99.5%		1.0100
97.5%		1.0100
90.0%		1.0100
75.0%	quartile	1.0000
50.0%	median	0.9900
25.0%	quartile	0.9750
10.0%		0.9700
2.5%		0.9700
0.5%		0.9700
0.0%	minimum	0.9700

Moments

Mean	0.988
Std Dev	0.0148324
Std Err Mean	0.0066332
upper 95% Mean	1.0064169
lower 95% Mean	0.9695831
N	5

Instrument=M-14
Measurement (ppm)



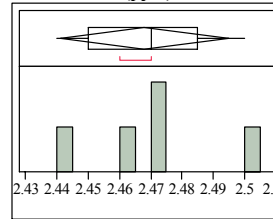
Quantiles

100.0%	maximum	1.0200
99.5%		1.0200
97.5%		1.0200
90.0%		1.0200
75.0%	quartile	1.0100
50.0%	median	1.0000
25.0%	quartile	0.9900
10.0%		0.9900
2.5%		0.9900
0.5%		0.9900
0.0%	minimum	0.9900

Moments

Mean	1
Std Dev	0.0122474
Std Err Mean	0.0054772
upper 95% Mean	1.0152072
lower 95% Mean	0.9847928
N	5

Instrument=M-14
Measurement (ppm)



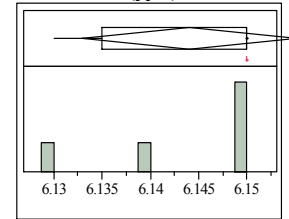
Quantiles

100.0%	maximum	2.5000
99.5%		2.5000
97.5%		2.5000
90.0%		2.5000
75.0%	quartile	2.4850
50.0%	median	2.4700
25.0%	quartile	2.4500
10.0%		2.4400
2.5%		2.4400
0.5%		2.4400
0.0%	minimum	2.4400

Moments

Mean	2.468
Std Dev	0.0216795
Std Err Mean	0.0096954
upper 95% Mean	2.4949186
lower 95% Mean	2.4410814
N	5

Instrument=M-14
Measurement (ppm)



Quantiles

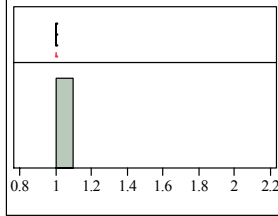
100.0%	maximum	6.1500
99.5%		6.1500
97.5%		6.1500
90.0%		6.1500
75.0%	quartile	6.1500
50.0%	median	6.1500
25.0%	quartile	6.1350
10.0%		6.1300
2.5%		6.1300
0.5%		6.1300
0.0%	minimum	6.1300

Moments

Mean	6.144
Std Dev	0.0089443
Std Err Mean	0.004
upper 95% Mean	6.1551058
lower 95% Mean	6.1328942
N	5

Exhibit A10i.

Distributions Type=Simulated
Sample Crosscheck Data 5000X
Dilution, Simulant=SRAT Receipt,
Known Concentration (ppm)=1,
Anion=Chloride, ICS-3000
Instrument=M-13
Measurement (ppm)



Quantiles

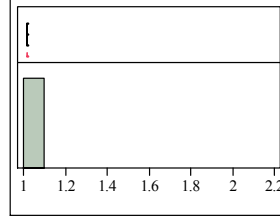
100.0%	maximum	1.0000
99.5%		1.0000
97.5%		1.0000
90.0%		1.0000
75.0%	quartile	1.0000
50.0%	median	1.0000
25.0%	quartile	1.0000
10.0%		1.0000
2.5%		1.0000
0.5%		1.0000
0.0%	minimum	1.0000

Moments

Mean	1
Std Dev	0
Std Err Mean	0
upper 95% Mean	1
lower 95% Mean	1
N	5

Exhibit A10j.

Distributions Type=Simulated
Sample Crosscheck Data 5000X
Dilution, Simulant=SRAT Receipt,
Known Concentration (ppm)=1,
Anion=Fluoride, ICS-3000
Instrument=M-13
Measurement (ppm)



Quantiles

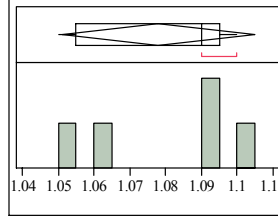
100.0%	maximum	1.0200
99.5%		1.0200
97.5%		1.0200
90.0%		1.0200
75.0%	quartile	1.0200
50.0%	median	1.0200
25.0%	quartile	1.0200
10.0%		1.0200
2.5%		1.0200
0.5%		1.0200
0.0%	minimum	1.0200

Moments

Mean	1.02
Std Dev	0
Std Err Mean	0
upper 95% Mean	1.02
lower 95% Mean	1.02
N	5

Exhibit A10k.

Distributions Type=Simulated
Sample Crosscheck Data 5000X
Dilution, Simulant=SRAT Receipt,
Known Concentration (ppm)=1,
Anion=Oxalate, ICS-3000
Instrument=M-13
Measurement (ppm)



Quantiles

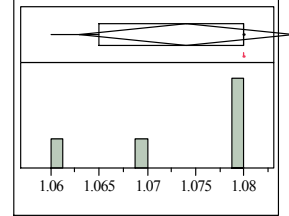
100.0%	maximum	1.1000
99.5%		1.1000
97.5%		1.1000
90.0%		1.1000
75.0%	quartile	1.0950
50.0%	median	1.0900
25.0%	quartile	1.0550
10.0%		1.0500
2.5%		1.0500
0.5%		1.0500
0.0%	minimum	1.0500

Moments

Mean	1.078
Std Dev	0.0216795
Std Err Mean	0.0096954
upper 95% Mean	1.1049186
lower 95% Mean	1.0510814
N	5

Exhibit A10l.

Distributions Type=Simulated
Sample Crosscheck Data 5000X
Dilution, Simulant=SRAT Receipt,
Known Concentration (ppm)=1,
Anion=Phosphate, ICS-3000
Instrument=M-13
Measurement (ppm)



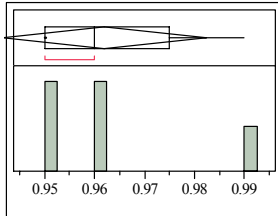
Quantiles

100.0%	maximum	1.0800
99.5%		1.0800
97.5%		1.0800
90.0%		1.0800
75.0%	quartile	1.0800
50.0%	median	1.0800
25.0%	quartile	1.0650
10.0%		1.0600
2.5%		1.0600
0.5%		1.0600
0.0%	minimum	1.0600

Moments

Mean	1.074
Std Dev	0.0089443
Std Err Mean	0.004
upper 95% Mean	1.0851058
lower 95% Mean	1.0628942
N	5

Instrument=M-14
Measurement (ppm)



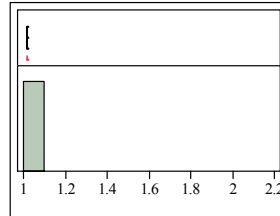
Quantiles

100.0%	maximum	0.99000
99.5%		0.99000
97.5%		0.99000
90.0%		0.99000
75.0%	quartile	0.97500
50.0%	median	0.96000
25.0%	quartile	0.95000
10.0%		0.95000
2.5%		0.95000
0.5%		0.95000
0.0%	minimum	0.95000

Moments

Mean	0.962
Std Dev	0.0164317
Std Err Mean	0.0073485
upper 95% Mean	0.9824026
lower 95% Mean	0.9415974
N	5

Instrument=M-14
Measurement (ppm)



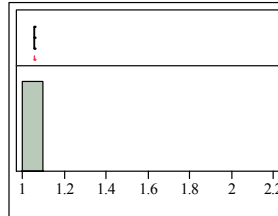
Quantiles

100.0%	maximum	1.0200
99.5%		1.0200
97.5%		1.0200
90.0%		1.0200
75.0%	quartile	1.0200
50.0%	median	1.0200
25.0%	quartile	1.0200
10.0%		1.0200
2.5%		1.0200
0.5%		1.0200
0.0%	minimum	1.0200

Moments

Mean	1.02
Std Dev	0
Std Err Mean	0
upper 95% Mean	1.02
lower 95% Mean	1.02
N	5

Instrument=M-14
Measurement (ppm)



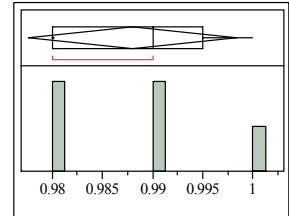
Quantiles

100.0%	maximum	1.0600
99.5%		1.0600
97.5%		1.0600
90.0%		1.0600
75.0%	quartile	1.0600
50.0%	median	1.0600
25.0%	quartile	1.0600
10.0%		1.0600
2.5%		1.0600
0.5%		1.0600
0.0%	minimum	1.0600

Moments

Mean	1.06
Std Dev	0
Std Err Mean	0
upper 95% Mean	1.06
lower 95% Mean	1.06
N	5

Instrument=M-14
Measurement (ppm)



Quantiles

100.0%	maximum	1.0000
99.5%		1.0000
97.5%		1.0000
90.0%		1.0000
75.0%	quartile	0.9950
50.0%	median	0.9900
25.0%	quartile	0.9800
10.0%		0.9800
2.5%		0.9800
0.5%		0.9800
0.0%	minimum	0.9800

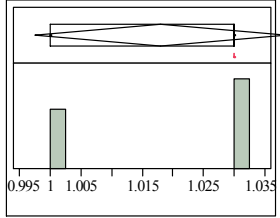
Moments

Mean	0.988
Std Dev	0.0083666
Std Err Mean	0.0037417
upper 95% Mean	0.9983885
lower 95% Mean	0.9776115
N	5

Exhibit A10m.

Distributions Type=Simulated
Sample Crosscheck Data 5000X
Dilution, Simulant=SRAT Receipt,
Known Concentration (ppm)=1,
Anion=Sulfate, ICS-3000

Instrument=M-13
Measurement (ppm)



Quantiles

100.0%	maximum	1.0300
99.5%		1.0300
97.5%		1.0300
90.0%		1.0300
75.0%	quartile	1.0300
50.0%	median	1.0300
25.0%	quartile	1.0000
10.0%		1.0000
2.5%		1.0000
0.5%		1.0000
0.0%	minimum	1.0000

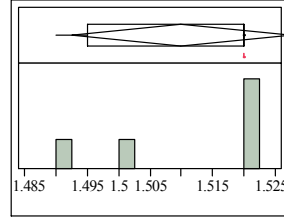
Moments

Mean	1.018
Std Dev	0.0164317
Std Err Mean	0.0073485
upper 95% Mean	1.0384026
lower 95% Mean	0.9975974
N	5

Exhibit A10n.

Distributions Type=Simulated
Sample Crosscheck Data 5000X
Dilution, Simulant=SRAT Receipt,
Known Concentration (ppm)=1.5,
Anion=Formate, ICS-3000

Instrument=M-13
Measurement (ppm)



Quantiles

100.0%	maximum	1.5200
99.5%		1.5200
97.5%		1.5200
90.0%		1.5200
75.0%	quartile	1.5200
50.0%	median	1.5200
25.0%	quartile	1.4950
10.0%		1.4900
2.5%		1.4900
0.5%		1.4900
0.0%	minimum	1.4900

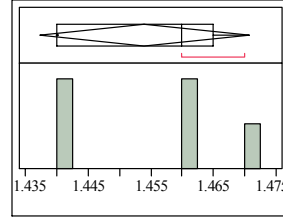
Moments

Mean	1.51
Std Dev	0.0141421
Std Err Mean	0.0063246
upper 95% Mean	1.5275598
lower 95% Mean	1.4924402
N	5

Exhibit A10o.

Distributions Type=Simulated
Sample Crosscheck Data 5000X
Dilution, Simulant=SRAT Receipt,
Known Concentration (ppm)=1.5,
Anion=Nitrate, ICS-3000

Instrument=M-13
Measurement (ppm)



Quantiles

100.0%	maximum	1.4700
99.5%		1.4700
97.5%		1.4700
90.0%		1.4700
75.0%	quartile	1.4650
50.0%	median	1.4600
25.0%	quartile	1.4400
10.0%		1.4400
2.5%		1.4400
0.5%		1.4400
0.0%	minimum	1.4400

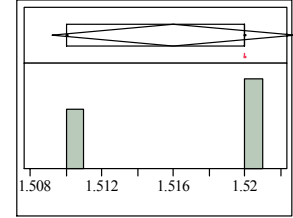
Moments

Mean	1.454
Std Dev	0.0134164
Std Err Mean	0.006
upper 95% Mean	1.4706587
lower 95% Mean	1.4373413
N	5

Exhibit A10p.

Distributions Type=Simulated
Sample Crosscheck Data 5000X
Dilution, Simulant=SRAT Receipt,
Known Concentration (ppm)=1.5,
Anion=Nitrite, ICS-3000

Instrument=M-13
Measurement (ppm)



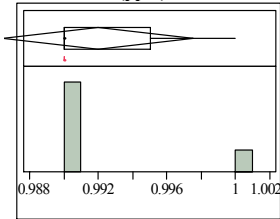
Quantiles

100.0%	maximum	1.5200
99.5%		1.5200
97.5%		1.5200
90.0%		1.5200
75.0%	quartile	1.5200
50.0%	median	1.5200
25.0%	quartile	1.5100
10.0%		1.5100
2.5%		1.5100
0.5%		1.5100
0.0%	minimum	1.5100

Moments

Mean	1.516
Std Dev	0.0054772
Std Err Mean	0.0024495
upper 95% Mean	1.5228009
lower 95% Mean	1.5091991
N	5

Instrument=M-14
Measurement (ppm)



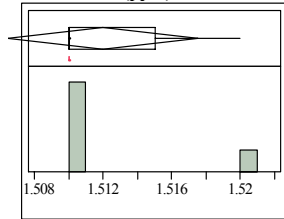
Quantiles

100.0%	maximum	1.0000
99.5%		1.0000
97.5%		1.0000
90.0%		1.0000
75.0%	quartile	0.9950
50.0%	median	0.9900
25.0%	quartile	0.9900
10.0%		0.9900
2.5%		0.9900
0.5%		0.9900
0.0%	minimum	0.9900

Moments

Mean	0.992
Std Dev	0.0044721
Std Err Mean	0.002
upper 95% Mean	0.9975529
lower 95% Mean	0.9864471
N	5

Instrument=M-14
Measurement (ppm)



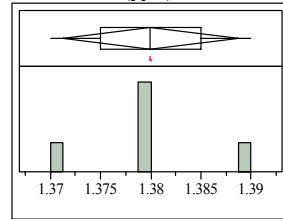
Quantiles

100.0%	maximum	1.5200
99.5%		1.5200
97.5%		1.5200
90.0%		1.5200
75.0%	quartile	1.5150
50.0%	median	1.5100
25.0%	quartile	1.5100
10.0%		1.5100
2.5%		1.5100
0.5%		1.5100
0.0%	minimum	1.5100

Moments

Mean	1.512
Std Dev	0.0044721
Std Err Mean	0.002
upper 95% Mean	1.5175529
lower 95% Mean	1.5064471
N	5

Instrument=M-14
Measurement (ppm)



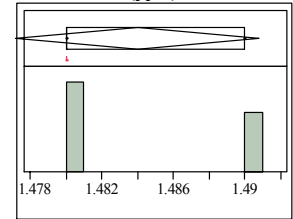
Quantiles

100.0%	maximum	1.3900
99.5%		1.3900
97.5%		1.3900
90.0%		1.3900
75.0%	quartile	1.3850
50.0%	median	1.3800
25.0%	quartile	1.3750
10.0%		1.3700
2.5%		1.3700
0.5%		1.3700
0.0%	minimum	1.3700

Moments

Mean	1.38
Std Dev	0.0070711
Std Err Mean	0.0031623
upper 95% Mean	1.3887799
lower 95% Mean	1.3712201
N	5

Instrument=M-14
Measurement (ppm)



Quantiles

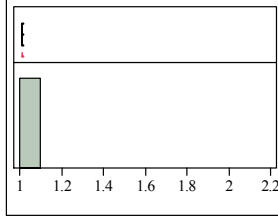
100.0%	maximum	1.4900
99.5%		1.4900
97.5%		1.4900
90.0%		1.4900
75.0%	quartile	1.4900
50.0%	median	1.4800
25.0%	quartile	1.4800
10.0%		1.4800
2.5%		1.4800
0.5%		1.4800
0.0%	minimum	1.4800

Moments

Mean	1.484
Std Dev	0.0054772
Std Err Mean	0.0024495
upper 95% Mean	1.4908009
lower 95% Mean	1.4771991
N	5

Exhibit A10q.

Distributions Type=Simulated
Sample Crosscheck Data 500X
Dilution, Simulant=SME, Known
Concentration (ppm)=1,
Anion=Chloride, ICS-3000
Instrument=M-13
Measurement (ppm)



Quantiles

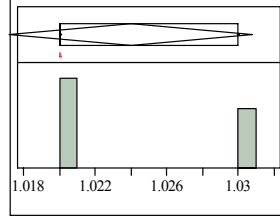
100.0%	maximum	1.0100
99.5%		1.0100
97.5%		1.0100
90.0%		1.0100
75.0%	quartile	1.0100
50.0%	median	1.0100
25.0%	quartile	1.0100
10.0%		1.0100
2.5%		1.0100
0.5%		1.0100
0.0%	minimum	1.0100

Moments

Mean	1.01
Std Dev	0
Std Err Mean	0
upper 95% Mean	1.01
lower 95% Mean	1.01
N	5

Exhibit A10r.

Distributions Type=Simulated
Sample Crosscheck Data 500X
Dilution, Simulant=SME, Known
Concentration (ppm)=1,
Anion=Fluoride, ICS-3000
Instrument=M-13
Measurement (ppm)



Quantiles

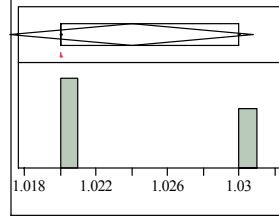
100.0%	maximum	1.0300
99.5%		1.0300
97.5%		1.0300
90.0%		1.0300
75.0%	quartile	1.0300
50.0%	median	1.0200
25.0%	quartile	1.0200
10.0%		1.0200
2.5%		1.0200
0.5%		1.0200
0.0%	minimum	1.0200

Moments

Mean	1.024
Std Dev	0.0054772
Std Err Mean	0.0024495
upper 95% Mean	1.0308009
lower 95% Mean	1.0171991
N	5

Exhibit A10s.

Distributions Type=Simulated
Sample Crosscheck Data 500X
Dilution, Simulant=SME, Known
Concentration (ppm)=1,
Anion=Nitrite, ICS-3000
Instrument=M-13
Measurement (ppm)



Quantiles

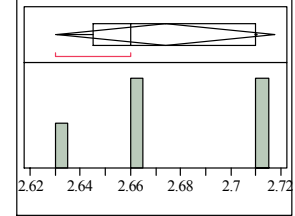
100.0%	maximum	1.0300
99.5%		1.0300
97.5%		1.0300
90.0%		1.0300
75.0%	quartile	1.0300
50.0%	median	1.0200
25.0%	quartile	1.0200
10.0%		1.0200
2.5%		1.0200
0.5%		1.0200
0.0%	minimum	1.0200

Moments

Mean	1.024
Std Dev	0.0054772
Std Err Mean	0.0024495
upper 95% Mean	1.0308009
lower 95% Mean	1.0171991
N	5

Exhibit A10t.

Distributions Type=Simulated
Sample Crosscheck Data 500X
Dilution, Simulant=SME, Known
Concentration (ppm)=2.5,
Anion=Oxalate, ICS-3000
Instrument=M-13
Measurement (ppm)



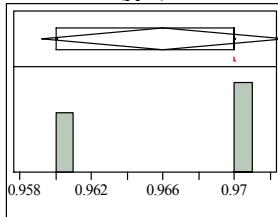
Quantiles

100.0%	maximum	2.7100
99.5%		2.7100
97.5%		2.7100
90.0%		2.7100
75.0%	quartile	2.7100
50.0%	median	2.6600
25.0%	quartile	2.6450
10.0%		2.6300
2.5%		2.6300
0.5%		2.6300
0.0%	minimum	2.6300

Moments

Mean	2.674
Std Dev	0.0350714
Std Err Mean	0.0156844
upper 95% Mean	2.7175468
lower 95% Mean	2.6304532
N	5

Instrument=M-14
Measurement (ppm)



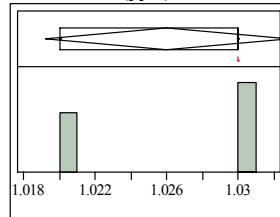
Quantiles

100.0%	maximum	0.97000
99.5%		0.97000
97.5%		0.97000
90.0%		0.97000
75.0%	quartile	0.97000
50.0%	median	0.97000
25.0%	quartile	0.96000
10.0%		0.96000
2.5%		0.96000
0.5%		0.96000
0.0%	minimum	0.96000

Moments

Mean	0.966
Std Dev	0.0054772
Std Err Mean	0.0024495
upper 95% Mean	0.9728009
lower 95% Mean	0.9591991
N	5

Instrument=M-14
Measurement (ppm)



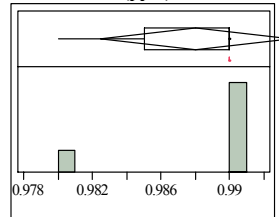
Quantiles

100.0%	maximum	1.0300
99.5%		1.0300
97.5%		1.0300
90.0%		1.0300
75.0%	quartile	1.0300
50.0%	median	1.0300
25.0%	quartile	1.0200
10.0%		1.0200
2.5%		1.0200
0.5%		1.0200
0.0%	minimum	1.0200

Moments

Mean	1.026
Std Dev	0.0054772
Std Err Mean	0.0024495
upper 95% Mean	1.0328009
lower 95% Mean	1.0191991
N	5

Instrument=M-14
Measurement (ppm)



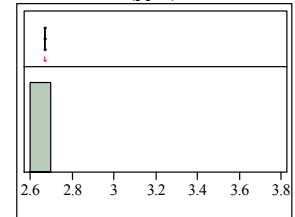
Quantiles

100.0%	maximum	0.99000
99.5%		0.99000
97.5%		0.99000
90.0%		0.99000
75.0%	quartile	0.99000
50.0%	median	0.99000
25.0%	quartile	0.98500
10.0%		0.98000
2.5%		0.98000
0.5%		0.98000
0.0%	minimum	0.98000

Moments

Mean	0.988
Std Dev	0.0044721
Std Err Mean	0.002
upper 95% Mean	0.9935529
lower 95% Mean	0.9824471
N	5

Instrument=M-14
Measurement (ppm)



Quantiles

100.0%	maximum	2.6700
99.5%		2.6700
97.5%		2.6700
90.0%		2.6700
75.0%	quartile	2.6700
50.0%	median	2.6700
25.0%	quartile	2.6700
10.0%		2.6700
2.5%		2.6700
0.5%		2.6700
0.0%	minimum	2.6700

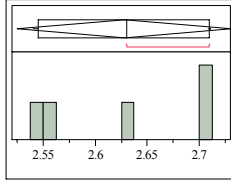
Moments

Mean	2.67
Std Dev	0
Std Err Mean	0
upper 95% Mean	2.67
lower 95% Mean	2.67
N	5

Exhibit A10u.

Distributions Type=Simulated
Sample Crosscheck Data 500X
Dilution, Simulant=SME, Known
Concentration (ppm)=2.5,
Anion=Phosphate, ICS-3000

Instrument=M-13
Measurement (ppm)



Quantiles

100.0%	maximum	2.7100
99.5%		2.7100
97.5%		2.7100
90.0%		2.7100
75.0%	quartile	2.7100
50.0%	median	2.6300
25.0%	quartile	2.5450
10.0%		2.5400
2.5%		2.5400
0.5%		2.5400
0.0%	minimum	2.5400

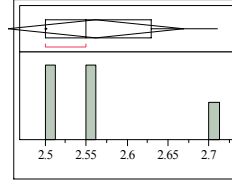
Moments

Mean	2.628
Std Dev	0.0825833
Std Err Mean	0.0369324
upper 95% Mean	2.7305407
lower 95% Mean	2.5254593
N	5

Exhibit A10v.

Distributions Type=Simulated
Sample Crosscheck Data 500X
Dilution, Simulant=SME, Known
Concentration (ppm)=2.5,
Anion=Sulfate, ICS-3000

Instrument=M-13
Measurement (ppm)



Quantiles

100.0%	maximum	2.7100
99.5%		2.7100
97.5%		2.7100
90.0%		2.7100
75.0%	quartile	2.6300
50.0%	median	2.5500
25.0%	quartile	2.5000
10.0%		2.5000
2.5%		2.5000
0.5%		2.5000
0.0%	minimum	2.5000

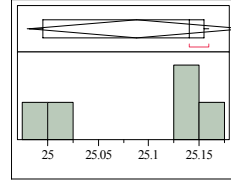
Moments

Mean	2.562
Std Dev	0.0864292
Std Err Mean	0.0386523
upper 95% Mean	2.669316
lower 95% Mean	2.454684
N	5

Exhibit A10w.

Distributions Type=Simulated
Sample Crosscheck Data 500X
Dilution, Simulant=SME, Known
Concentration (ppm)=2.5,
Anion=Nitrate, ICS-3000

Instrument=M-13
Measurement (ppm)



Quantiles

100.0%	maximum	25.160
99.5%		25.160
97.5%		25.160
90.0%		25.160
75.0%	quartile	25.155
50.0%	median	25.140
25.0%	quartile	24.995
10.0%		24.980
2.5%		24.980
0.5%		24.980
0.0%	minimum	24.980

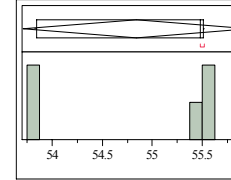
Moments

Mean	25.088
Std Dev	0.0858487
Std Err Mean	0.0383927
upper 95% Mean	25.194595
lower 95% Mean	24.981405
N	5

Exhibit A10x.

Distributions Type=Simulated
Sample Crosscheck Data 500X
Dilution, Simulant=SME, Known
Concentration (ppm)=60,
Anion=Formate, ICS-3000

Instrument=M-13
Measurement (ppm)



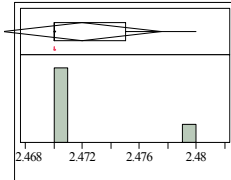
Quantiles

100.0%	maximum	55.520
99.5%		55.520
97.5%		55.520
90.0%		55.520
75.0%	quartile	55.510
50.0%	median	55.480
25.0%	quartile	53.845
10.0%		53.830
2.5%		53.830
0.5%		53.830
0.0%	minimum	53.830

Moments

Mean	54.838
Std Dev	0.9066532
Std Err Mean	0.4054676
upper 95% Mean	55.963759
lower 95% Mean	53.712241
N	5

Instrument=M-14
Measurement (ppm)



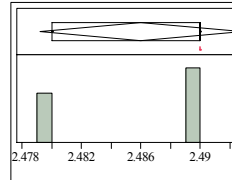
Quantiles

100.0%	maximum	2.4800
99.5%		2.4800
97.5%		2.4800
90.0%		2.4800
75.0%	quartile	2.4750
50.0%	median	2.4700
25.0%	quartile	2.4700
10.0%		2.4700
2.5%		2.4700
0.5%		2.4700
0.0%	minimum	2.4700

Moments

Mean	2.472
Std Dev	0.0044721
Std Err Mean	0.002
upper 95% Mean	2.4775529
lower 95% Mean	2.4664471
N	5

Instrument=M-14
Measurement (ppm)



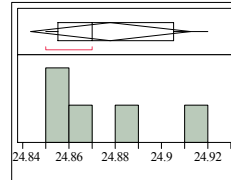
Quantiles

100.0%	maximum	2.4900
99.5%		2.4900
97.5%		2.4900
90.0%		2.4900
75.0%	quartile	2.4900
50.0%	median	2.4900
25.0%	quartile	2.4800
10.0%		2.4800
2.5%		2.4800
0.5%		2.4800
0.0%	minimum	2.4800

Moments

Mean	2.486
Std Dev	0.0054772
Std Err Mean	0.0024495
upper 95% Mean	2.4928009
lower 95% Mean	2.4791991
N	5

Instrument=M-14
Measurement (ppm)



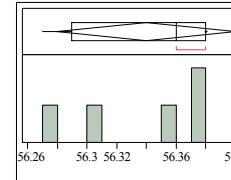
Quantiles

100.0%	maximum	24.920
99.5%		24.920
97.5%		24.920
90.0%		24.920
75.0%	quartile	24.905
50.0%	median	24.870
25.0%	quartile	24.855
10.0%		24.850
2.5%		24.850
0.5%		24.850
0.0%	minimum	24.850

Moments

Mean	24.878
Std Dev	0.0277489
Std Err Mean	0.0124097
upper 95% Mean	24.912455
lower 95% Mean	24.843545
N	5

Instrument=M-14
Measurement (ppm)



Quantiles

100.0%	maximum	56.380
99.5%		56.380
97.5%		56.380
90.0%		56.380
75.0%	quartile	56.380
50.0%	median	56.360
25.0%	quartile	56.290
10.0%		56.270
2.5%		56.270
0.5%		56.270
0.0%	minimum	56.270

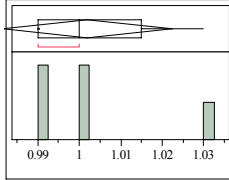
Moments

Mean	56.34
Std Dev	0.0484768
Std Err Mean	0.0216795
upper 95% Mean	56.400192
lower 95% Mean	56.279808
N	5

Exhibit A10x.

Distributions Type=Simulated
Sample Crosscheck Data 500X
Dilution, Simulant=SRAT Receipt,
Known Concentration (ppm)=1,
Anion=Chloride, ICS-3000

Instrument=M-13
Measurement (ppm)



Quantiles

100.0%	maximum	1.0300
99.5%		1.0300
97.5%		1.0300
90.0%		1.0300
75.0%	quartile	1.0150
50.0%	median	1.0000
25.0%	quartile	0.9900
10.0%		0.9900
2.5%		0.9900
0.5%		0.9900
0.0%	minimum	0.9900

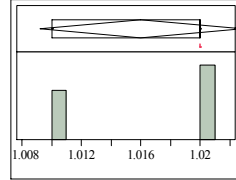
Moments

Mean	1.002
Std Dev	0.0164317
Std Err Mean	0.0073485
upper 95% Mean	1.0224026
lower 95% Mean	0.9815974
N	5

Exhibit A10y.

Distributions Type=Simulated
Sample Crosscheck Data 500X
Dilution, Simulant=SRAT Receipt,
Known Concentration (ppm)=1,
Anion=Fluoride, ICS-3000

Instrument=M-13
Measurement (ppm)



Quantiles

100.0%	maximum	1.0200
99.5%		1.0200
97.5%		1.0200
90.0%		1.0200
75.0%	quartile	1.0200
50.0%	median	1.0200
25.0%	quartile	1.0100
10.0%		1.0100
2.5%		1.0100
0.5%		1.0100
0.0%	minimum	1.0100

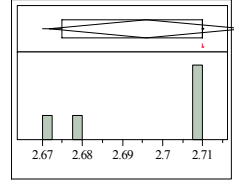
Moments

Mean	1.016
Std Dev	0.0054772
Std Err Mean	0.0024495
upper 95% Mean	1.0228009
lower 95% Mean	1.0091991
N	5

Exhibit A10z.

Distributions Type=Simulated
Sample Crosscheck Data 500X
Dilution, Simulant=SRAT Receipt,
Known Concentration (ppm)=2.5,
Anion=Oxalate, ICS-3000

Instrument=M-13
Measurement (ppm)



Quantiles

100.0%	maximum	2.7100
99.5%		2.7100
97.5%		2.7100
90.0%		2.7100
75.0%	quartile	2.7100
50.0%	median	2.7100
25.0%	quartile	2.6750
10.0%		2.6700
2.5%		2.6700
0.5%		2.6700
0.0%	minimum	2.6700

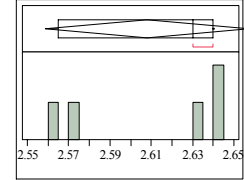
Moments

Mean	2.696
Std Dev	0.0194936
Std Err Mean	0.0087178
upper 95% Mean	2.7202045
lower 95% Mean	2.6717955
N	5

Exhibit A10aa.

Distributions Type=Simulated
Sample Crosscheck Data 500X
Dilution, Simulant=SRAT Receipt,
Known Concentration (ppm)=2.5,
Anion=Phosphate, ICS-3000

Instrument=M-13
Measurement (ppm)



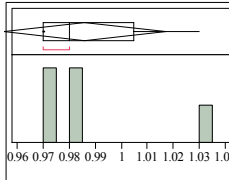
Quantiles

100.0%	maximum	2.6400
99.5%		2.6400
97.5%		2.6400
90.0%		2.6400
75.0%	quartile	2.6400
50.0%	median	2.6300
25.0%	quartile	2.5650
10.0%		2.5600
2.5%		2.5600
0.5%		2.5600
0.0%	minimum	2.5600

Moments

Mean	2.608
Std Dev	0.0396232
Std Err Mean	0.01772
upper 95% Mean	2.6571987
lower 95% Mean	2.5588013
N	5

Instrument=M-14
Measurement (ppm)



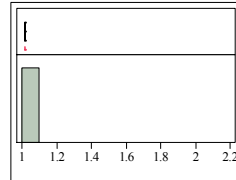
Quantiles

100.0%	maximum	1.0300
99.5%		1.0300
97.5%		1.0300
90.0%		1.0300
75.0%	quartile	1.0050
50.0%	median	0.9800
25.0%	quartile	0.9700
10.0%		0.9700
2.5%		0.9700
0.5%		0.9700
0.0%	minimum	0.9700

Moments

Mean	0.986
Std Dev	0.0250998
Std Err Mean	0.011225
upper 95% Mean	1.0171655
lower 95% Mean	0.9548345
N	5

Instrument=M-14
Measurement (ppm)



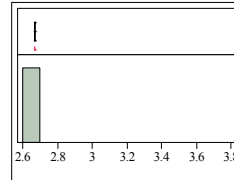
Quantiles

100.0%	maximum	1.0200
99.5%		1.0200
97.5%		1.0200
90.0%		1.0200
75.0%	quartile	1.0200
50.0%	median	1.0200
25.0%	quartile	1.0200
10.0%		1.0200
2.5%		1.0200
0.5%		1.0200
0.0%	minimum	1.0200

Moments

Mean	1.02
Std Dev	0
Std Err Mean	0
upper 95% Mean	1.02
lower 95% Mean	1.02
N	5

Instrument=M-14
Measurement (ppm)



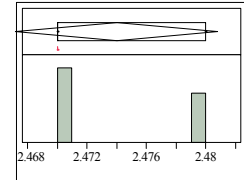
Quantiles

100.0%	maximum	2.6700
99.5%		2.6700
97.5%		2.6700
90.0%		2.6700
75.0%	quartile	2.6700
50.0%	median	2.6700
25.0%	quartile	2.6700
10.0%		2.6700
2.5%		2.6700
0.5%		2.6700
0.0%	minimum	2.6700

Moments

Mean	2.67
Std Dev	0
Std Err Mean	0
upper 95% Mean	2.67
lower 95% Mean	2.67
N	5

Instrument=M-14
Measurement (ppm)



Quantiles

100.0%	maximum	2.4800
99.5%		2.4800
97.5%		2.4800
90.0%		2.4800
75.0%	quartile	2.4800
50.0%	median	2.4700
25.0%	quartile	2.4700
10.0%		2.4700
2.5%		2.4700
0.5%		2.4700
0.0%	minimum	2.4700

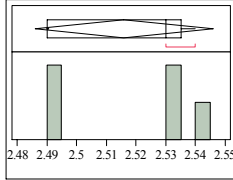
Moments

Mean	2.474
Std Dev	0.0054772
Std Err Mean	0.0024495
upper 95% Mean	2.4808009
lower 95% Mean	2.4671991
N	5

Exhibit A10ab.

Distributions Type=Simulated
Sample Crosscheck Data 500X
Dilution, Simulant=SRAT Receipt,
Known Concentration (ppm)=2.5,
Anion=Sulfate, ICS-3000

Instrument=M-13
Measurement (ppm)



Quantiles

100.0% maximum	2.5400
99.5%	2.5400
97.5%	2.5400
90.0%	2.5400
75.0% quartile	2.5350
50.0% median	2.5300
25.0% quartile	2.4900
10.0%	2.4900
2.5%	2.4900
0.5%	2.4900
0.0% minimum	2.4900

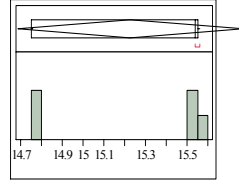
Moments

Mean	2.516
Std Dev	0.0240832
Std Err Mean	0.0107703
upper 95% Mean	2.5459032
lower 95% Mean	2.4860968
N	5

Exhibit A10ac.

Distributions Type=Simulated
Sample Crosscheck Data 500X
Dilution, Simulant=SRAT Receipt,
Known Concentration (ppm)=15,
Anion=Formate, ICS-3000

Instrument=M-13
Measurement (ppm)



Quantiles

100.0% maximum	15.560
99.5%	15.560
97.5%	15.560
90.0%	15.560
75.0% quartile	15.550
50.0% median	15.540
25.0% quartile	14.750
10.0%	14.750
2.5%	14.750
0.5%	14.750
0.0% minimum	14.750

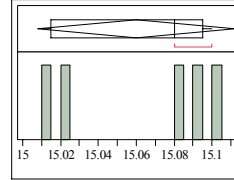
Moments

Mean	15.228
Std Dev	0.4364287
Std Err Mean	0.1951768
upper 95% Mean	15.769898
lower 95% Mean	14.686102
N	5

Exhibit A10ad.

Distributions Type=Simulated
Sample Crosscheck Data 500X
Dilution, Simulant=SRAT Receipt,
Known Concentration (ppm)=15,
Anion=Nitrate, ICS-3000

Instrument=M-13
Measurement (ppm)



Quantiles

100.0% maximum	15.100
99.5%	15.100
97.5%	15.100
90.0%	15.100
75.0% quartile	15.095
50.0% median	15.080
25.0% quartile	15.015
10.0%	15.010
2.5%	15.010
0.5%	15.010
0.0% minimum	15.010

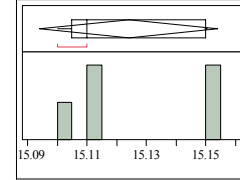
Moments

Mean	15.06
Std Dev	0.041833
Std Err Mean	0.0187083
upper 95% Mean	15.111943
lower 95% Mean	15.008057
N	5

Exhibit A10ae.

Distributions Type=Simulated
Sample Crosscheck Data 500X
Dilution, Simulant=SRAT Receipt,
Known Concentration (ppm)=15,
Anion=Nitrite, ICS-3000

Instrument=M-13
Measurement (ppm)



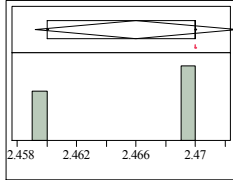
Quantiles

100.0% maximum	15.150
99.5%	15.150
97.5%	15.150
90.0%	15.150
75.0% quartile	15.150
50.0% median	15.110
25.0% quartile	15.105
10.0%	15.100
2.5%	15.100
0.5%	15.100
0.0% minimum	15.100

Moments

Mean	15.124
Std Dev	0.0240832
Std Err Mean	0.0107703
upper 95% Mean	15.153903
lower 95% Mean	15.094097
N	5

Instrument=M-14
Measurement (ppm)



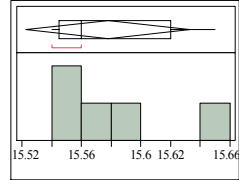
Quantiles

100.0% maximum	2.4700
99.5%	2.4700
97.5%	2.4700
90.0%	2.4700
75.0% quartile	2.4700
50.0% median	2.4700
25.0% quartile	2.4600
10.0%	2.4600
2.5%	2.4600
0.5%	2.4600
0.0% minimum	2.4600

Moments

Mean	2.466
Std Dev	0.0054772
Std Err Mean	0.0024495
upper 95% Mean	2.4728009
lower 95% Mean	2.4591991
N	5

Instrument=M-14
Measurement (ppm)



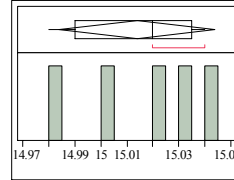
Quantiles

100.0% maximum	15.650
99.5%	15.650
97.5%	15.650
90.0%	15.650
75.0% quartile	15.620
50.0% median	15.560
25.0% quartile	15.545
10.0%	15.540
2.5%	15.540
0.5%	15.540
0.0% minimum	15.540

Moments

Mean	15.578
Std Dev	0.0443847
Std Err Mean	0.0198494
upper 95% Mean	15.633111
lower 95% Mean	15.522889
N	5

Instrument=M-14
Measurement (ppm)



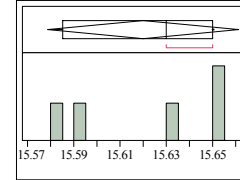
Quantiles

100.0% maximum	15.040
99.5%	15.040
97.5%	15.040
90.0%	15.040
75.0% quartile	15.035
50.0% median	15.020
25.0% quartile	14.990
10.0%	14.980
2.5%	14.980
0.5%	14.980
0.0% minimum	14.980

Moments

Mean	15.014
Std Dev	0.0240832
Std Err Mean	0.0107703
upper 95% Mean	15.043903
lower 95% Mean	14.984097
N	5

Instrument=M-14
Measurement (ppm)



Quantiles

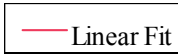
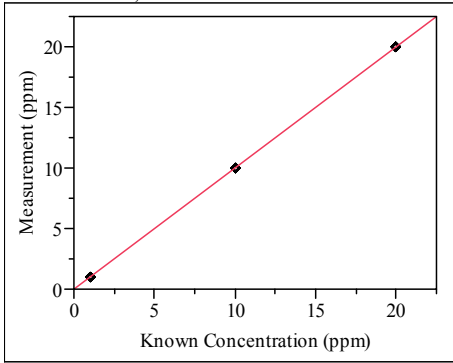
100.0% maximum	15.650
99.5%	15.650
97.5%	15.650
90.0%	15.650
75.0% quartile	15.650
50.0% median	15.630
25.0% quartile	15.585
10.0%	15.580
2.5%	15.580
0.5%	15.580
0.0% minimum	15.580

Moments

Mean	15.62
Std Dev	0.0331662
Std Err Mean	0.0148324
upper 95% Mean	15.661181
lower 95% Mean	15.578819
N	5

Exhibit A11a.

Bivariate Fit of Measurement (ppm) By Known Concentration (ppm)
Anion=Chloride, ICS-3000 Instrument=M-13



Linear Fit
Measurement (ppm) = -0.006956 + 1.0003506*Known Concentration (ppm)

Summary of Fit

RSquare	0.999999
RSquare Adj	0.999999
Root Mean Square Error	0.008729
Mean of Response	10.33
Observations (or Sum Wgts)	9

Lack Of Fit

Source	DF	Sum of Squares	Mean Square	F Ratio
Lack Of Fit	1	6.15013e-8	6.15e-8	0.0007
Pure Error	6	0.00053333	0.000089	Prob > F
Total Error	7	0.00053339		0.9799
			Max RSq	1.0000

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	542.38007	542.380	7117918
Error	7	0.00053	7.62e-5	Prob > F
C. Total	8	542.38060		<.0001

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|	Lower 95%	Upper 95%
Intercept	-0.006956	0.004845	-1.44	0.1943	-0.018413	0.0045019
Known Concentration (ppm)	1.0003506	0.000375	2667.9	<.0001	0.9994639	1.0012372

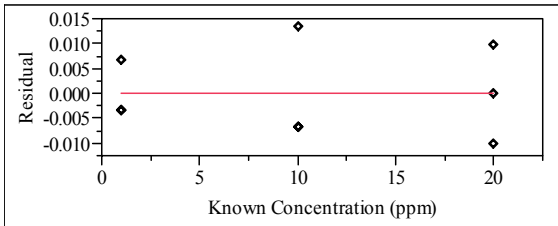
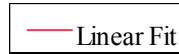
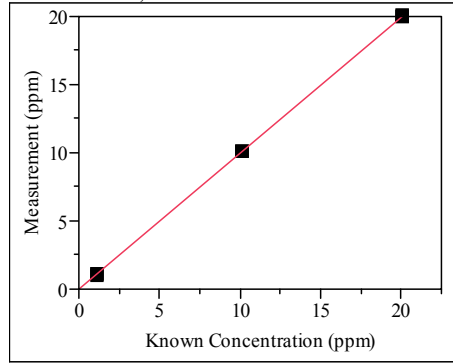


Exhibit A11b.

Bivariate Fit of Measurement (ppm) By Known Concentration (ppm)
Anion=Chloride, ICS-3000 Instrument=M-14



Linear Fit
Measurement (ppm) = -0.038309 + 0.9990836*Known Concentration (ppm)

Summary of Fit

RSquare	0.999994
RSquare Adj	0.999993
Root Mean Square Error	0.021046
Mean of Response	10.28556
Observations (or Sum Wgts)	9

Lack Of Fit

Source	DF	Sum of Squares	Mean Square	F Ratio
Lack Of Fit	1	0.00090043	0.000900	2.4557
Pure Error	6	0.00220000	0.000367	Prob > F
Total Error	7	0.00310043		0.1681
			Max RSq	1.0000

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	541.00712	541.007	1221459
Error	7	0.00310	0.000443	Prob > F
C. Total	8	541.01022		<.0001

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|	Lower 95%	Upper 95%
Intercept	-0.038309	0.011682	-3.28	0.0135	-0.065932	-0.010685
Known Concentration (ppm)	0.9990836	0.000904	1105.2	<.0001	0.9969461	1.0012212

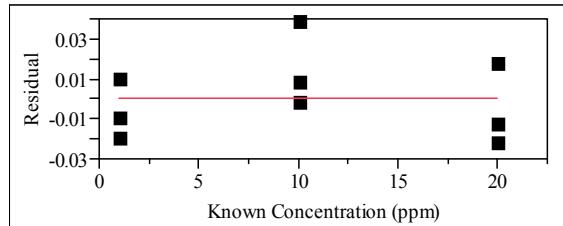
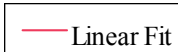
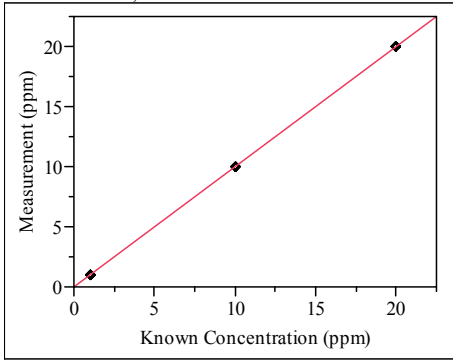


Exhibit A11c.

Bivariate Fit of Measurement (ppm) By Known Concentration (ppm)
Anion=Fluoride, ICS-3000 Instrument=M-13



Linear Fit

Measurement (ppm) = 0.0143604 + 0.9988253*Known Concentration (ppm)

Summary of Fit

RSquare	0.999991
RSquare Adj	0.99999
Root Mean Square Error	0.025656
Mean of Response	10.33556
Observations (or Sum Wgts)	9

Lack Of Fit

Source	DF	Sum of Squares	Mean Square	F Ratio
Lack Of Fit	1	0.00167435	0.001674	3.4248
Pure Error	6	0.00293333	0.000489	Prob > F
Total Error	7	0.00460769		0.1137
			Max RSq	1.0000

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	540.72741	540.727	821473.2
Error	7	0.00461	0.000658	Prob > F
C. Total	8	540.73202		<.0001

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|	Lower 95%	Upper 95%
Intercept	0.0143604	0.014241	1.01	0.3469	-0.019315	0.0480358
Known Concentration (ppm)	0.9988253	0.001102	906.35	<.0001	0.9962195	1.0014312

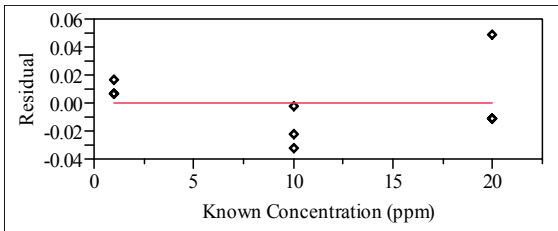
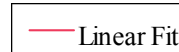
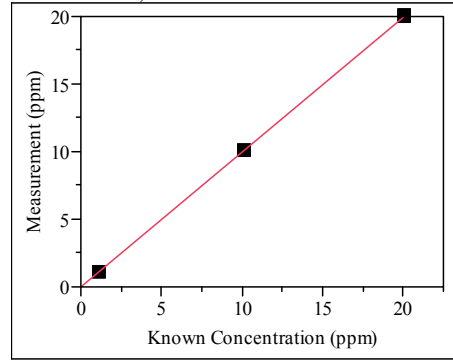


Exhibit A11d.

Bivariate Fit of Measurement (ppm) By Known Concentration (ppm)
Anion=Fluoride, ICS-3000 Instrument=M-14



Linear Fit

Measurement (ppm) = 0.0334133 + 0.9949385*Known Concentration (ppm)

Summary of Fit

RSquare	0.999995
RSquare Adj	0.999994
Root Mean Square Error	0.019285
Mean of Response	10.31444
Observations (or Sum Wgts)	9

Lack Of Fit

Source	DF	Sum of Squares	Mean Square	F Ratio
Lack Of Fit	1	0.00040351	0.000404	1.1005
Pure Error	6	0.00220000	0.000367	Prob > F
Total Error	7	0.00260351		0.3346
			Max RSq	1.0000

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	536.52722	536.527	1442551
Error	7	0.00260	0.000372	Prob > F
C. Total	8	536.52982		<.0001

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|	Lower 95%	Upper 95%
Intercept	0.0334133	0.010705	3.12	0.0168	0.0080999	0.0587267
Known Concentration (ppm)	0.9949385	0.000828	1201.1	<.0001	0.9929797	0.9968973

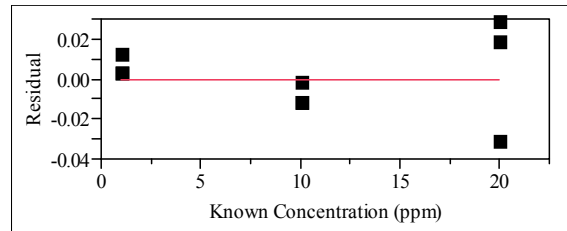
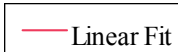
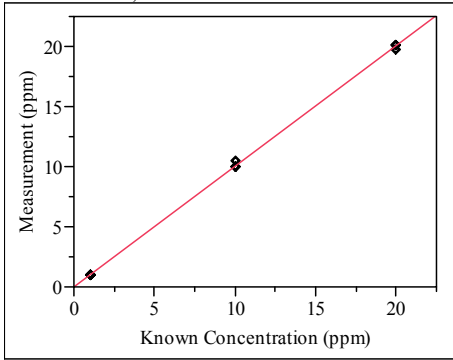


Exhibit A11e.

Bivariate Fit of Measurement (ppm) By Known Concentration (ppm)
Anion=Formate, ICS-3000 Instrument=M-13



Linear Fit

Measurement (ppm) = 0.0452829 + 1.0019619*Known Concentration (ppm)

Summary of Fit

RSquare	0.999523
RSquare Adj	0.999455
Root Mean Square Error	0.192553
Mean of Response	10.39889
Observations (or Sum Wgts)	9

Lack Of Fit

Source	DF	Sum of Squares	Mean Square	F Ratio
Lack Of Fit	1	0.05966943	0.059669	1.7913
Pure Error	6	0.19986667	0.033311	Prob > F
Total Error	7	0.25953610		0.2293
				Max RSq
				0.9996

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	544.12875	544.129	14675.81
Error	7	0.25954	0.037	Prob > F
C. Total	8	544.38829		<.0001

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|	Lower 95%	Upper 95%
Intercept	0.0452829	0.106883	0.42	0.6845	-0.207455	0.2980209
Known Concentration (ppm)	1.0019619	0.008271	121.14	<.0001	0.9824044	1.0215193

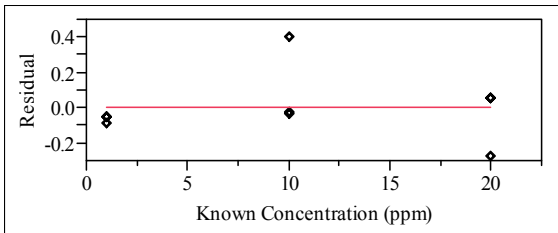
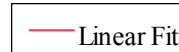
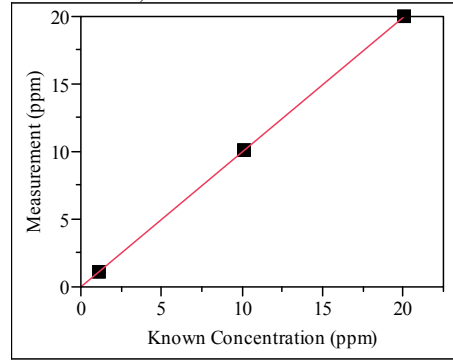


Exhibit A11f.

Bivariate Fit of Measurement (ppm) By Known Concentration (ppm)
Anion=Formate, ICS-3000 Instrument=M-14



Linear Fit

Measurement (ppm) = 0.0217343 + 0.9945633*Known Concentration (ppm)

Summary of Fit

RSquare	0.999998
RSquare Adj	0.999997
Root Mean Square Error	0.013105
Mean of Response	10.29889
Observations (or Sum Wgts)	9

Lack Of Fit

Source	DF	Sum of Squares	Mean Square	F Ratio
Lack Of Fit	1	0.00000221	2.214e-6	0.0111
Pure Error	6	0.00120000	0.000200	Prob > F
Total Error	7	0.00120221		0.9196
				Max RSq
				1.0000

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	536.12269	536.123	3121623
Error	7	0.00120	0.000172	Prob > F
C. Total	8	536.12389		<.0001

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|	Lower 95%	Upper 95%
Intercept	0.0217343	0.007274	2.99	0.0203	0.004533	0.0389357
Known Concentration (ppm)	0.9945633	0.000563	1766.8	<.0001	0.9932323	0.9958944

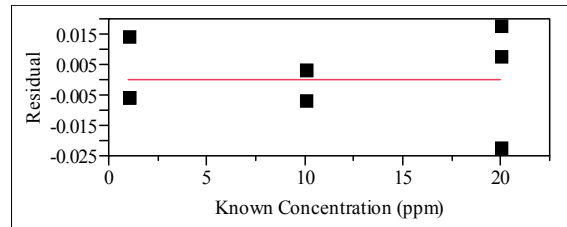
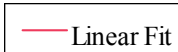
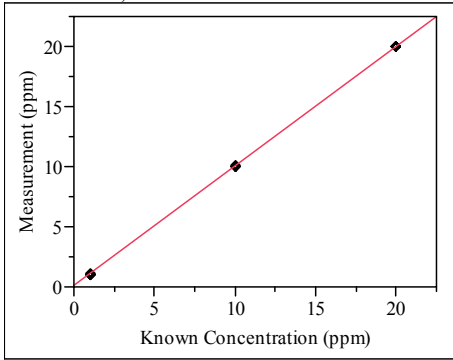


Exhibit A11g.

Bivariate Fit of Measurement (ppm) By Known Concentration (ppm)
Anion=Nitrate, ICS-3000 Instrument=M-13



Linear Fit
Measurement (ppm) = 0.062583 + 0.9987823*Known Concentration (ppm)

Summary of Fit

RSquare	0.999997
RSquare Adj	0.999996
Root Mean Square Error	0.016019
Mean of Response	10.38333
Observations (or Sum Wgts)	9

Lack Of Fit

Source	DF	Sum of Squares	Mean Square	F Ratio
Lack Of Fit	1	0.00006298	0.000063	0.2180
Pure Error	6	0.00173333	0.000289	Prob > F
Total Error	7	0.00179631		0.6570
			Max RSq	1.0000

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	540.68080	540.681	2106967
Error	7	0.00180	0.000257	Prob > F
C. Total	8	540.68260		<.0001

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|	Lower 95%	Upper 95%
Intercept	0.062583	0.008892	7.04	0.0002	0.0415568	0.0836093
Known Concentration (ppm)	0.9987823	0.000688	1451.5	<.0001	0.9971552	1.0004093

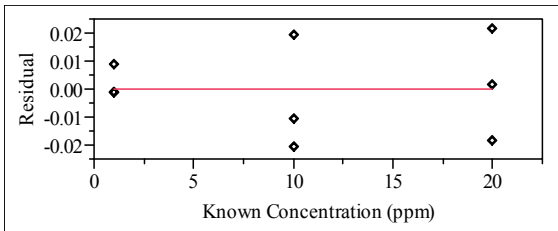
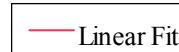
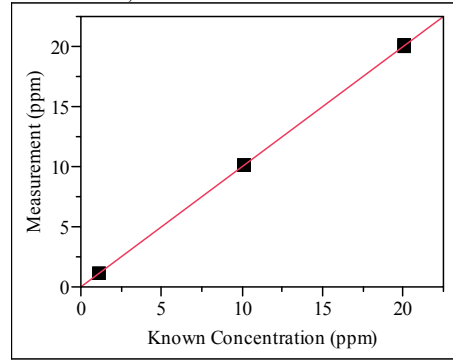


Exhibit A11h.

Bivariate Fit of Measurement (ppm) By Known Concentration (ppm)
Anion=Nitrate, ICS-3000 Instrument=M-14



Linear Fit
Measurement (ppm) = 0.0058979 + 0.9973862*Known Concentration (ppm)

Summary of Fit

RSquare	0.999986
RSquare Adj	0.999983
Root Mean Square Error	0.033351
Mean of Response	10.31222
Observations (or Sum Wgts)	9

Lack Of Fit

Source	DF	Sum of Squares	Mean Square	F Ratio
Lack Of Fit	1	0.00018604	0.000186	0.1469
Pure Error	6	0.00760000	0.001267	Prob > F
Total Error	7	0.00778604		0.7148
			Max RSq	1.0000

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	539.17037	539.170	484738.4
Error	7	0.00779	0.001112	Prob > F
C. Total	8	539.17816		<.0001

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|	Lower 95%	Upper 95%
Intercept	0.0058979	0.018513	0.32	0.7593	-0.037877	0.0496733
Known Concentration (ppm)	0.9973862	0.001433	696.23	<.0001	0.9939988	1.0007737

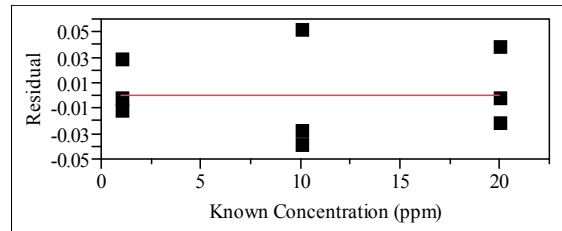
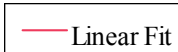
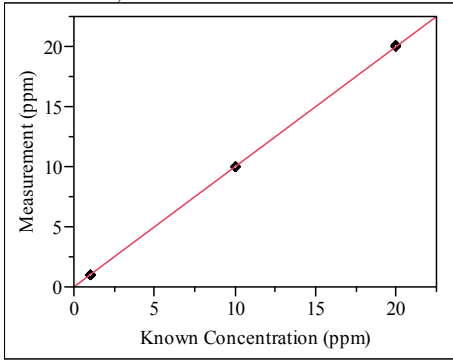


Exhibit A11i.

Bivariate Fit of Measurement (ppm) By Known Concentration (ppm)
Anion=Nitrite, ICS-3000 Instrument=M-13



Linear Fit

Measurement (ppm) = 0.0078598 + 1.0013899*Known Concentration (ppm)

Summary of Fit

RSquare	0.999973
RSquare Adj	0.999969
Root Mean Square Error	0.04615
Mean of Response	10.35556
Observations (or Sum Wgts)	9

Lack Of Fit

Source	DF	Sum of Squares	Mean Square	F Ratio
Lack Of Fit	1	0.00010849	0.000108	0.0440
Pure Error	6	0.01480000	0.002467	Prob > F
Total Error	7	0.01490849		0.8408
			Max RSq	
			1.0000	

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	543.50771	543.508	255193.8
Error	7	0.01491	0.00213	Prob > F
C. Total	8	543.52262		<.0001

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|	Lower 95%	Upper 95%
Intercept	0.0078598	0.025617	0.31	0.7679	-0.052715	0.0684341
Known Concentration (ppm)	1.0013899	0.001982	505.17	<.0001	0.9967025	1.0060773

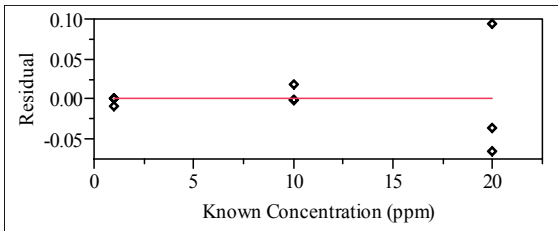
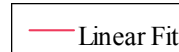
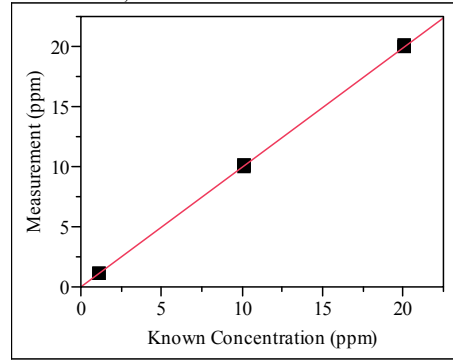


Exhibit A11j.

Bivariate Fit of Measurement (ppm) By Known Concentration (ppm)
Anion=Nitrite, ICS-3000 Instrument=M-14



Linear Fit

Measurement (ppm) = -0.012374 + 0.9959287*Known Concentration (ppm)

Summary of Fit

RSquare	0.999967
RSquare Adj	0.999963
Root Mean Square Error	0.050197
Mean of Response	10.27889
Observations (or Sum Wgts)	9

Lack Of Fit

Source	DF	Sum of Squares	Mean Square	F Ratio
Lack Of Fit	1	0.00077146	0.000771	0.2744
Pure Error	6	0.01686667	0.002811	Prob > F
Total Error	7	0.01763813		0.6192
			Max RSq	
			1.0000	

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	537.59565	537.596	213354.2
Error	7	0.01764	0.00252	Prob > F
C. Total	8	537.61329		<.0001

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|	Lower 95%	Upper 95%
Intercept	-0.012374	0.027864	-0.44	0.6704	-0.078261	0.0535128
Known Concentration (ppm)	0.9959287	0.002156	461.90	<.0001	0.9908302	1.0010271

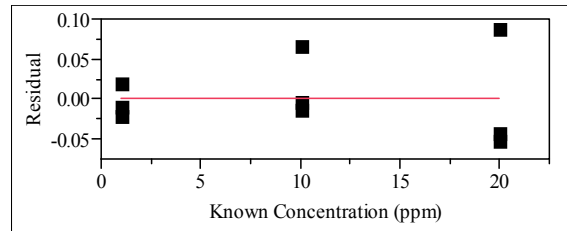
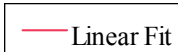
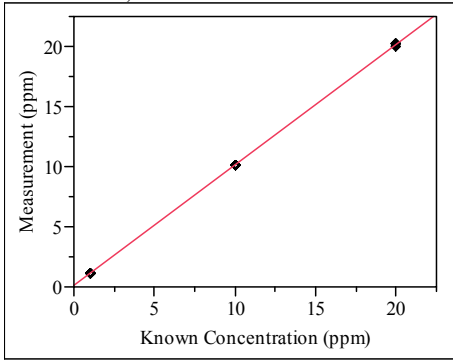


Exhibit A11k.

Bivariate Fit of Measurement (ppm) By Known Concentration (ppm)
Anion=Oxalate, ICS-3000 Instrument=M-13



Linear Fit

Measurement (ppm) = 0.0711931 + 1.0047232*Known Concentration (ppm)

Summary of Fit

RSquare	0.999967
RSquare Adj	0.999963
Root Mean Square Error	0.05058
Mean of Response	10.45333
Observations (or Sum Wgts)	9

Lack Of Fit

Source	DF	Sum of Squares	Mean Square	F Ratio
Lack Of Fit	1	0.00010849	0.000108	0.0366
Pure Error	6	0.01780000	0.002967	Prob > F
Total Error	7	0.01790849		0.8547
			Max RSq	1.0000

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	547.13209	547.132	213860.9
Error	7	0.01791	0.002558	Prob > F
C. Total	8	547.15000		<.0001

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|	Lower 95%	Upper 95%
Intercept	0.0711931	0.028076	2.54	0.0389	0.0048033	0.1375829
Known Concentration (ppm)	1.0047232	0.002173	462.45	<.0001	0.9995859	1.0098606

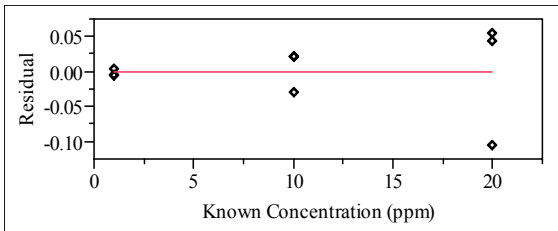
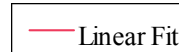
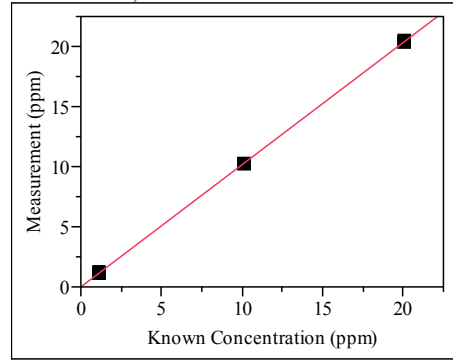


Exhibit A11l.

Bivariate Fit of Measurement (ppm) By Known Concentration (ppm)
Anion=Oxalate, ICS-3000 Instrument=M-14



Linear Fit

Measurement (ppm) = 0.0370172 + 1.0131919*Known Concentration (ppm)

Summary of Fit

RSquare	0.99999
RSquare Adj	0.999989
Root Mean Square Error	0.027975
Mean of Response	10.50667
Observations (or Sum Wgts)	9

Lack Of Fit

Source	DF	Sum of Squares	Mean Square	F Ratio
Lack Of Fit	1	0.00067804	0.000678	0.8476
Pure Error	6	0.00480000	0.000800	Prob > F
Total Error	7	0.00547804		0.3928
			Max RSq	1.0000

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	556.39432	556.394	710976.4
Error	7	0.00548	0.000783	Prob > F
C. Total	8	556.39980		<.0001

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|	Lower 95%	Upper 95%
Intercept	0.0370172	0.015528	2.38	0.0486	0.0002988	0.0737357
Known Concentration (ppm)	1.0131919	0.001202	843.19	<.0001	1.0103505	1.0160332

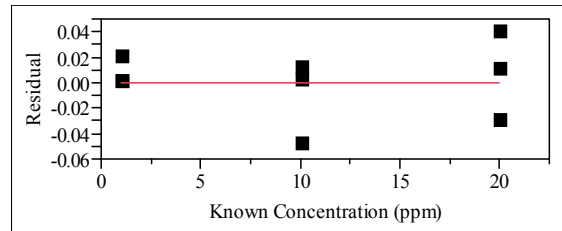
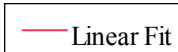
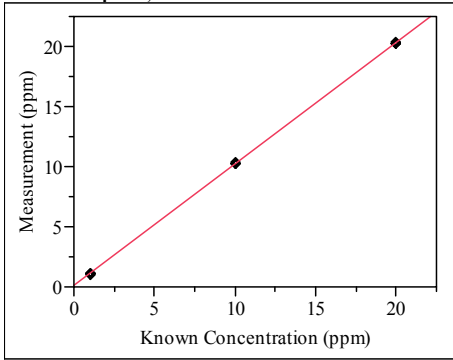


Exhibit A11m.

Bivariate Fit of Measurement (ppm) By Known Concentration (ppm)
Anion=Phosphate, ICS-3000 Instrument=M-13



Linear Fit

Measurement (ppm) = 0.1094588 + 1.0101599*Known Concentration (ppm)

Summary of Fit

RSquare	0.999945
RSquare Adj	0.999937
Root Mean Square Error	0.065765
Mean of Response	10.54778
Observations (or Sum Wgts)	9

Lack Of Fit

Source	DF	Sum of Squares	Mean Square	F Ratio
Lack Of Fit	1	0.02140836	0.021408	14.4869
Pure Error	6	0.00886667	0.001478	Prob > F
Total Error	7	0.03027503		0.0089
			Max RSq	1.0000

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	553.06928	553.069	127877.2
Error	7	0.03028	0.004325	Prob > F
C. Total	8	553.09956		<.0001

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|	Lower 95%	Upper 95%
Intercept	0.1094588	0.036505	3.00	0.0200	0.0231383	0.1957793
Known Concentration (ppm)	1.0101599	0.002825	357.60	<.0001	1.0034802	1.0168396

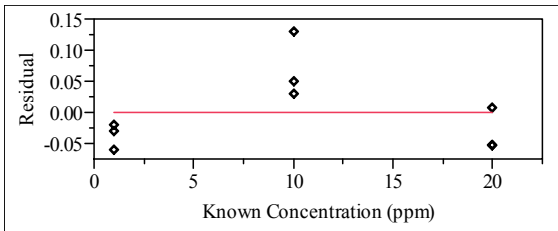
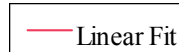
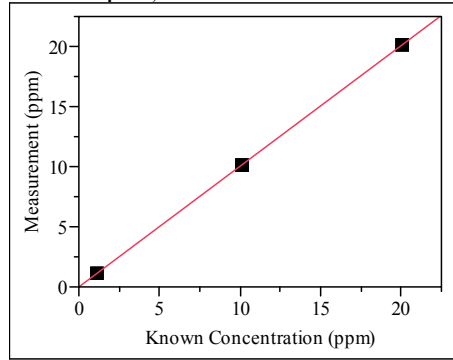


Exhibit A11n.

Bivariate Fit of Measurement (ppm) By Known Concentration (ppm)
Anion=Phosphate, ICS-3000 Instrument=M-14



Linear Fit

Measurement (ppm) = -0.014569 + 1.0031304*Known Concentration (ppm)

Summary of Fit

RSquare	0.999996
RSquare Adj	0.999996
Root Mean Square Error	0.017089
Mean of Response	10.35111
Observations (or Sum Wgts)	9

Lack Of Fit

Source	DF	Sum of Squares	Mean Square	F Ratio
Lack Of Fit	1	0.00044434	0.000444	1.6663
Pure Error	6	0.00160000	0.000267	Prob > F
Total Error	7	0.00204434		0.2443
			Max RSq	1.0000

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	545.39864	545.399	1867491
Error	7	0.00204	0.000292	Prob > F
C. Total	8	545.40069		<.0001

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|	Lower 95%	Upper 95%
Intercept	-0.014569	0.009486	-1.54	0.1684	-0.037	0.0078615
Known Concentration (ppm)	1.0031304	0.000734	1366.6	<.0001	1.0013946	1.0048661

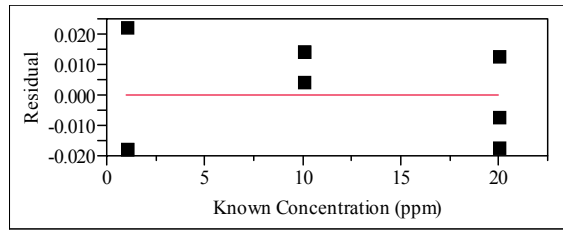
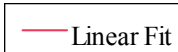
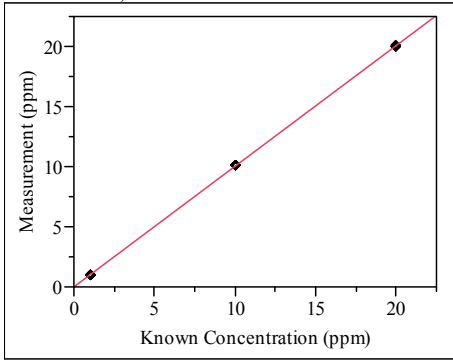


Exhibit A11o.

Bivariate Fit of Measurement (ppm) By Known Concentration (ppm)
Anion=Sulfate, ICS-3000 Instrument=M-13



Linear Fit

Measurement (ppm) = 0.0318204 + 1.0021894*Known Concentration (ppm)

Summary of Fit

RSquare	0.999985
RSquare Adj	0.999982
Root Mean Square Error	0.034691
Mean of Response	10.38778
Observations (or Sum Wgts)	9

Lack Of Fit

Source	DF	Sum of Squares	Mean Square	F Ratio
Lack Of Fit	1	0.00489077	0.004891	8.3051
Pure Error	6	0.00353333	0.000589	Prob > F
Total Error	7	0.00842411		0.0280
			Max RSq	1.0000

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	544.37593	544.376	452348.4
Error	7	0.00842	0.001203	Prob > F
C. Total	8	544.38436		<.0001

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|	Lower 95%	Upper 95%
Intercept	0.0318204	0.019256	1.65	0.1424	-0.013713	0.0773542
Known Concentration (ppm)	1.0021894	0.00149	672.57	<.0001	0.9986659	1.0057129

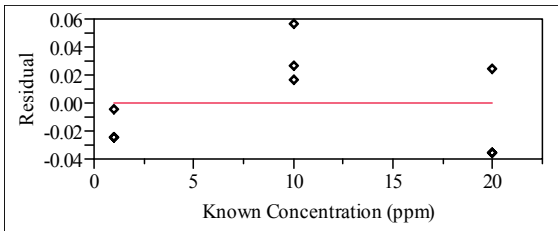
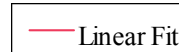
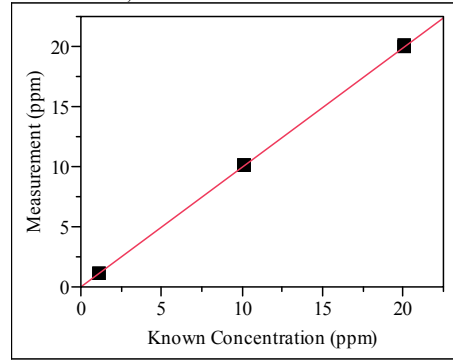


Exhibit A11p.

Bivariate Fit of Measurement (ppm) By Known Concentration (ppm)
Anion=Sulfate, ICS-3000 Instrument=M-14



Linear Fit

Measurement (ppm) = 0.0092435 + 0.9960947*Known Concentration (ppm)

Summary of Fit

RSquare	0.999984
RSquare Adj	0.999982
Root Mean Square Error	0.034688
Mean of Response	10.30222
Observations (or Sum Wgts)	9

Lack Of Fit

Source	DF	Sum of Squares	Mean Square	F Ratio
Lack Of Fit	1	0.00122269	0.001223	1.0189
Pure Error	6	0.00720000	0.001200	Prob > F
Total Error	7	0.00842269		0.3517
			Max RSq	1.0000

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	537.77493	537.775	446938.3
Error	7	0.00842	0.001203	Prob > F
C. Total	8	537.78336		<.0001

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|	Lower 95%	Upper 95%
Intercept	0.0092435	0.019255	0.48	0.6458	-0.036286	0.0547735
Known Concentration (ppm)	0.9960947	0.00149	668.53	<.0001	0.9925715	0.9996179

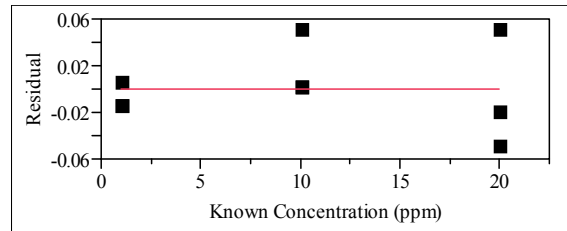
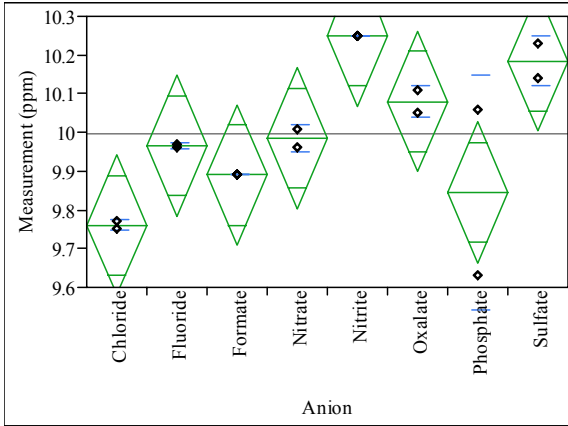


Exhibit A12a.

Oneway Analysis of Measurement (ppm) By Anion ICS-3000
Instrument=M-13



**Oneway Anova
Summary of Fit**

Rsquare	0.79879
Adj Rsquare	0.622732
Root Mean Square Error	0.111692
Mean of Response	9.995
Observations (or Sum Wgts)	16

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio	Prob > F
Anion	7	0.39620000	0.056600	4.5371	0.0249
Error	8	0.09980000	0.012475		
C. Total	15	0.49600000			

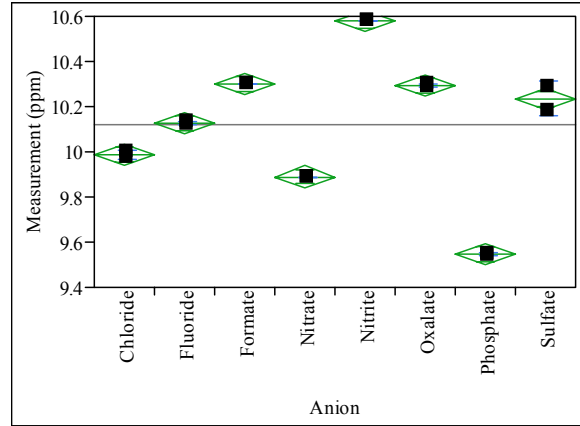
Means for Oneway Anova

Level	Number	Mean	Std Error	Lower 95%	Upper 95%
Chloride	2	9.7600	0.07898	9.578	9.942
Fluoride	2	9.9650	0.07898	9.783	10.147
Formate	2	9.8900	0.07898	9.708	10.072
Nitrate	2	9.9850	0.07898	9.803	10.167
Nitrite	2	10.2500	0.07898	10.068	10.432
Oxalate	2	10.0800	0.07898	9.898	10.262
Phosphate	2	9.8450	0.07898	9.663	10.027
Sulfate	2	10.1850	0.07898	10.003	10.367

Std Error uses a pooled estimate of error variance

Exhibit A12b.

Oneway Analysis of Measurement (ppm) By Anion ICS-3000
Instrument=M-14



**Oneway Anova
Summary of Fit**

Rsquare	0.995202
Adj Rsquare	0.991003
Root Mean Square Error	0.028831
Mean of Response	10.11938
Observations (or Sum Wgts)	16

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio	Prob > F
Anion	7	1.3792438	0.197035	237.0344	<.0001
Error	8	0.0066500	0.000831		
C. Total	15	1.3858937			

Means for Oneway Anova

Level	Number	Mean	Std Error	Lower 95%	Upper 95%
Chloride	2	9.9850	0.02039	9.938	10.032
Fluoride	2	10.1250	0.02039	10.078	10.172
Formate	2	10.3000	0.02039	10.253	10.347
Nitrate	2	9.8900	0.02039	9.843	9.937
Nitrite	2	10.5800	0.02039	10.533	10.627
Oxalate	2	10.2950	0.02039	10.248	10.342
Phosphate	2	9.5450	0.02039	9.498	9.592
Sulfate	2	10.2350	0.02039	10.188	10.282

Std Error uses a pooled estimate of error variance

Distribution:

C. J. Bannochie, 773-42A
D. R. Best, 999-W
J. M. Bricker, 704-27S
A. Y. Brown, 704-28S
C. J. Coleman, 773-A
T. B. Edwards, 999-W
M. T. Feller, 704-28S
T. L. Fellingner, 704-26S
C. C. Herman, 999-W
J. F. Iaukea, 704-30S
P. L. Lee, 773-42A
R. N. Mahannah, 773-28S
S. L. Marra, 773-A
R. T. McNew, 704-27S
J. E. Occhipinti, 704-S
A. B. Osteen, 704-S
D. K. Peeler, 999-W
J. W. Ray, 704-S
D. C. Sherburne, 704-S
M. E. Stone, 999-W
J. P. Vaughan, 773-41A